United States Environmental Protection Agency, Office of Air and Radiation, Office of Transportation and Air Quality

Date   2014-September-26

Tier 3 Update (Release 15.0)

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value
VI-0.5	Process Code	Select the desired process code for the current submission.	TestVehicleInformationSubmission/ TestVehicleInformationDetails	InformationProcessCode	1	1 per Test Vehicle Configuration	A(1)	Enumeration	1	1					
VI-1	Manufacturer Code	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	TestVehicleInformationSubmission/ TestVehicleInformationDetails	EPAManufacturerCode	1	1 per Test Vehicle Configuration	A(3)	Fixed String	3	3	[A-Z0-9]{3}				
VI-2	Vehicle ID	A unique alphanumeric identifier assigned by the manufacturer to each test vehicle.	TestVehicleInformationSubmission/ TestVehicleInformationDetails	VehicleIdentificationText	1	1 per Test Vehicle Configuration	A(20)	String	1	20					
VI-3	Vehicle Configuration Number	A system-generated number that is assigned to each new unique test vehicle configuration. A mfr code, vehicle id, test vehicle configuration number can be used for any test group, evap/refueling family, or model year- not just the values entered into field #s VI-5,VI-6,and VI-7.	TestVehicleInformationSubmission/ TestVehicleInformationDetails	VehicleConfigurationNumber	0	1 per Test Vehicle Configuration	N(2)	Integer						0	99
VI-4	Manufacturer Vehicle Configuration Number	This optional field may be used by manufacturers to track manufacturers' internal designations for configurations. EPA doesn't use this field.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleDescriptionDetails	ManufacturerVehicleConfigurationNumber	0	1 per Test Vehicle Configuration	N(2)	Integer						0	99
VI-5	Original Test Group Name	The actual test group for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleDescriptionDetails	TestGroupName	1	1 per Test Vehicle Configuration	A(12)	Fixed string	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}([\.][A-Z0-9]{1,6})?				
VI-6	Original Evaporative/Refueling Family Name	The evaporative/refueling family for this test vehicle configuration. Not applicable for diesel vehicles.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleDescriptionDetails	EvaporativeRefuelingFamilyName	0	1 per Test Vehicle Configuration	A(12)	Fixed String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4}[0-9]{4}[A-Z0-9]{3}				
VI-6.5	Leak Family Identifier	Enter a unique 3-character string to identify a specific Leak Family within an Evaporative Family	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleDescriptionDetails	LeakFamilyIdentifier	0	1 per Evaporative Family	A(3)	Fixed String	3	3	[A-Z0-9]{3}				
VI-6.6	Leak Family Name	The Leak Family Name is the Verify system-generated Evaporative Family Name concatenated with the Leak Family Identifier (separated by a '-' (dash))	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleDescriptionDetails	LeakFamilyName	0	1 per Leak Family Identifier	A(16)	Fixed String	16	16					
VI-7	Original Test Vehicle Model Year	The model year for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleDescriptionDetails	ModelYear	1	1 per Test Vehicle Configuration	N(4)	Year type (1970-2100)	4	4				1970	2100

VI-8	Represented test vehicle make	The represented test vehicle make (aka division name) for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleDescriptionDetails	ActualTestVehicleMakeText	1	1 per Test Vehicle Configuration	A(20)	String	1	20					
VI-9	Represented test vehicle model	The represented test vehicle model (aka carline name) for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleDescriptionDetails	ActualTestVehicleModelText	1	1 per Test Vehicle Configuration	A(50)	String	1	50					
VI-10.5	Drive Source	Enter the applicable value for the drive source for this test vehicle configuration. Select 'E' for fuel cell electric vehicle.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ DriveSourceDetails	DriveSourceIdentifier	1	1..n per Test Vehicle Configuration	A(1)	Enumeration							
VI-10.6	Hybrid Indicator	Verify assigned based on values selected for Drive Source (VI-10.5)	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ EPAGeneratedTestVehicleDetails	HybridVehicleIndicator	1	1 per Test Vehicle Configuration	A(1)	Enumeration							
VI-11.1	Fuel(s)	Enter all applicable fuels for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ DriveSourceDetails	FuelIdentifier	1	1..n per Drive Source per Test Vehicle Configuration	A(3)	Enumeration							
VI-11.2	Multiple Fuel Storage- Separate or Together	If multiple fuels are selected for Fuel(s), are the fuels stored separately or together for this test vehicle configuration?	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	MultipleFuelStorageMethodIdentifier	0	1 per Test Vehicle Configuration	A(8)	Enumeration							
VI-11.3	Multiple Fuel Combustion- Separate or Together	If multiple fuels are selected for Fuel(s), are the fuels combusted separately or together for this test vehicle configuration?	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	MultipleFuelCombustionMethodIdentifier	0	1 per Test Vehicle Configuration	A(8)	Enumeration							
VI-11.4	Fuel Cell Indicator	Is this test vehicle configuration equipped with a Fuel Cell?	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	FuelCellIndicator	0	1 per Test Vehicle Configuration	A(1)	Enumeration							
VI-11.5	Rechargeable Energy Storage System Indicator	Is this test vehicle equipped with a rechargeable energy storage system?	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	RechargeableEnergyStorageSystemIndicator	0	1 per Test Vehicle Configuration	A(1)	Enumeration							
VI-11.6	Rechargeable Energy Storage System	Enter the applicable type of energy storage device for this test group.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	RechargeableEnergyStorageDeviceIdentifier	0	1 per Test Vehicle Configuration	A(2)	Enumeration							
VI-11.7	Rechargeable Energy Storage System, if Other	Enter a description of the energy storage device for this test group if "other" selected.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	RechargeableEnergyStorageDeviceOtherText	0	1 per Test Vehicle Configuration	A(30)	String	1	30					

ID	Field	Description	XML Path	Element	Min	Frequency	Format	Type				
VI-11.8	Off-board Charge Capable Indicator	Select "Yes" if this test vehicle configuration is equipped with an electric motor that is capable of being charged off-board the vehicle, otherwise select "No".	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	OffBoardChargeCapabilityIndicator	0	1 per Test Vehicle Configuration	A(1)	Enumeration				
VI-13	Drive Mode While Testing	Enter the applicable test drive code for the way this test vehicle configuration was/is to be tested.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	TestDriveCode	1	1 per Test Vehicle Configuration	A(1)	Enumeration				
VI-14	Shift indicator light usage	Enter the applicable shift indicator light usage code. One usage code per test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	ShiftIndicatorLightUsageIdentifier	1	1 per Test Vehicle Configuration	A(1)	Enumeration				
VI-15	Aged emission component usage	Enter the age of the emission control system components (in thousands of miles) or enter "4 = No aged components" if this test vehicle configuration does not have aged components.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	AgedComponentUsageIdentifier	1	1 per Test Vehicle Configuration	A(3)	Enumeration				
VI-16	Odometer correction -- initial	Enter the applicable initial odometer correction.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ OdometerCorrectionDetails	CorrectionInitialValue	1	1 per Test Vehicle Configuration	N(7,1)	Decimal	7	1	0.0	999999.9
VI-17	Odometer correction factor	Enter the multiplicative odometer correction factor.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ OdometerCorrectionDetails	CorrectionFactorValue	1	1 per Test Vehicle Configuration	N(5,4)	Decimal	5	4	0.0	9.9999
VI-18	Odometer correction sign	Enter the odometer correction sign- plus or minus.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ OdometerCorrectionDetails	CorrectionSignIdentifier	1	1 per Test Vehicle Configuration	A(1)	Enumeration				
VI-19	Odometer Correction units code	Enter the applicable units for the odometer correction factor- miles or kilometers.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ OdometerCorrectionDetails	CorrectionUnitsCode	1	1 per Test Vehicle Configuration	A(1)	Enumeration				
VI-20	Engine Code	Enter the applicable engine code assigned by the manufacturer for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	EngineCodeText	1	1 per Test Vehicle Configuration	A(14)	String	1	14		
VI-21	Rated horsepower	Enter the applicable rated horsepower for this test vehicle configuration. Reference SAE J2723 and SAE J1349.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	EngineRatedHorsePowerValue	1	1 per Test Vehicle Configuration	N(4)	Integer			1	9999
VI-22	Displacement	Enter the applicable engine displacement in liters for this test vehicle configuration. In Liters.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	EngineDisplacementValue	1	1 per Test Vehicle Configuration	N(5,3)	Decimal	5	3	0.001	99.999
VI-23	Air Aspiration Method	Enter the applicable air aspiration method for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ AirAspirationDetails	AirAspirationMethodIdentifier	1	1 per Test Vehicle Configuration	A(2)	Enumeration				
VI-24	Air Aspiration Method if Other	Enter a description of the air aspiration method if "other" is selected for Air Aspiration Method.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ AirAspirationDetails	AirAspirationMethodOtherText	0	1 per Test Vehicle Configuration	A(30)	String	1	30		

ID	Field Name	Description	XML Path	XML Element	Req	Occurrence	Format	Type	Min Len	Max Len	EPA Generated Element	Total	Dec	Min	Max
VI-25	Number of Air Aspiration Devices	If not naturally aspirated, enter the number of Air Aspiration Devices. Default is "0".	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ AirAspirationDetails	AirAspirationDeviceCount	0	1 per Test Vehicle Configuration	N(2)	Integer						0	99
VI-26	Air Aspiration Device Configuration	Enter the applicable air aspiration device configuration for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ AirAspirationDetails	AirAspirationConfigurationIdentifier	0	1 per Test Vehicle Configuration	A(2)	Enumeration							
VI-27	Charge Air Cooler Type	Enter the applicable charge air cooler (also known as inter-cooler) type for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	ChargeAirCoolerIdentifier	0	1 per Test Vehicle Configuration	A(1)	Enumeration							
VI-28	Emission Control Device Comments	Enter any additional comments about the emission control devices installed on this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	EmissionsControlDeviceCommentsText	0	1 per Test Vehicle Configuration	A(1000)	String	1	1000					
VI-29	Curb weight	Enter the curb weight in pounds for this test vehicle configuration. Curb weight is defined as the actual or mfr's estimated weight of the vehicle in operational status with all standard equipment and weight of fuel at nominal tank capacity and the weight of optional equipment computed in accordance with CFR86.082-24.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleSpecificationsDetails	CurbWeightValue	1	1 per Test Vehicle Configuration	N(5)	Integer						0	14000
VI-30	ETW	Enter the ETW, equivalent test weight, in pounds for this test vehicle configuration. ETW is defined as the weight within an inertia weight class which is used in the dynamometer testing of a vehicle and which is based on its loaded vehicle weight or adjusted loaded vehicle weight in accordance with the provisions of CFR86.1803-01.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleSpecificationsDetails	EquivalentTestWeightValue	1	1 per Test Vehicle Configuration	N(5)	Enumeration						0	14000
VI-31	ALVW	Enter the adjusted, loaded vehicle weight in pounds for this test vehicle configuration. ALVW is defined as the average of the vehicle curb weight and gross vehicle weight rating in accordance with the provisions of CFR86.1803-01.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ EPAGeneratedTestVehicleDetails		0	1 per Test Vehicle Configuration	N(5)	Integer			AdjustedLoadedVehicleWeightValue			0	14000
VI-32	LVW	The loaded vehicle weight in pounds will be calculated by Verify for this test vehicle configuration. LVW is defined as the vehicle curb weight plus 300 pounds.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ EPAGeneratedTestVehicleDetails		0	1 per Test Vehicle Configuration	N(5)	Integer			LoadedVehicleWeightValue			0	14000
VI-33	Gross vehicle weight rating (GVWR)	Enter the gross vehicle weight in pounds for this test vehicle configuration. Gross vehicle weight is defined as the value specified by the mfr as the maximum design loaded weight of a single vehicle.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleSpecificationsDetails	GrossVehicleWeightRatingValue	0	1 per Test Vehicle Configuration	N(5)	Integer						0	14000
VI-34	N/V Ratio	Enter the applicable N/V ratio for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleSpecificationsDetails	NVRatioValue	1	1 per Test Vehicle Configuration	N(4,1)	Decimal				4	1	0.0	999.9
VI-35	Axle Ratio	Enter the axle ratio for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ VehicleSpecificationsDetails	AxleRatioValue	1	1 per Test Vehicle Configuration	N(3,2)	Decimal				3	2	0.00	9.99

VI-36	**Transmission Type**	Enter the transmission type for this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TransmissionSpecifications Details	LightDutyTransmissionTypeIdentifier	1	1 per Test Vehicle Configuration	A(3)	Enumeration					
VI-37	**Transmission Type, if "Other"**	Enter a description of the transmission type if "Other" is selected.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TransmissionSpecifications Details	LightDutyTransmissionType OtherText	0	1 per Test Vehicle Configuration	A(30)	String	1	30			
VI-38	**Transmission Lockup**	Is the transmission on this test vehicle configuration equipped with lockup?	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TransmissionSpecifications Details	TransmissionLockupIndicator	1	1 per Test Vehicle Configuration	A(1)	Enumeration					
VI-39	**Creeper Gear**	Is the transmission on this test vehicle configuration equipped with a creeper gear?	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TransmissionSpecifications Details	TransmissionCreeperGearIndicator	1	1 per Test Vehicle Configuration	A(1)	Enumeration					
VI-40	**Number of Transmission Gears**	Enter the number of transmission gears on this test vehicle configuration. If this vehicle is equipped with a "transmission type" of "CVT", enter "1" for the number of gears.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TransmissionSpecifications Details	TransmissionGearCount	1	1 per Test Vehicle Configuration	N(2)	Integer				1	99
VI-40.5	**Test Procedure Dynamometer Coefficients Category**	Select all applicable test procedure dynamometer coefficients categories for which target and set coefficients must be specified for this test vehicle (FTP/Hwy, Cold CO, and/or US06). Note- Target and set coefficients must be entered for each selected test procedure.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TargetSetCoefficientDetails	TestProcedureDynamometerCoefficientsCategory	1	1..n per Test Vehicle Configuration	A(7)	Enumeration					
VI-41	**Target Coefficient A**	Enter the target A-term coefficient from test track force vs. velocity equation for this test vehicle configuration. (lbf)	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TargetSetCoefficientDetails	TargetCoefficientAValue	1	1..# of selected test procedures per Test Vehicle Configuration	N(6,3)	Decimal			6	3	-999.999	999.999
VI-42	**Target Coefficient B**	Enter the target B-term coefficient from test track force vs. velocity equation for this test vehicle configuration. (lbf/mph)	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TargetSetCoefficientDetails	TargetCoefficientBValue	1	1..# of selected test procedures per Test Vehicle Configuration	N(6,5)	Decimal			6	5	-9.99999	9.99999
VI-43	**Target Coefficient C**	Enter the target C-term coefficient from test track force vs. velocity equation for this test vehicle configuration. (lbf/mph**2)	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TargetSetCoefficientDetails	TargetCoefficientCValue	1	1..# of selected test procedures per Test Vehicle Configuration	N(7,6)	Decimal			7	6	-9.999999	9.999999

ID	Name	Description	XPath	Element		Occurrence	Format	Type					Min	Max
VI-43.5	EPA-Calculated Total Road Load Horsepower (for C-H-E Coefficients)	Verify calculated total road load horsepower (TRLHP50) based on C-H-E target coefficients	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ EPAGeneratedTestVehicleDetails	TotalRoadLoadHorsepowerValue	0	1 per Test Vehicle Configuration	N(3,1)	Decimal			3	1	0	99.9
VI-44	Set Coefficient A	EPA derived or manufacturer supplied set A-term coefficient from dynamometer force vs. velocity equation for this test vehicle configuration. (lbf)	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TargetSetCoefficientDetails	SetCoefficientAValue	1	1..# of selected test procedures per Test Vehicle Configuration	N(6,3)	Decimal			6	3	-999.999	999.999
VI-45	Set Coefficient B	EPA derived or manufacturer supplied set B-term coefficient from dynamometer force vs. velocity equation for this test vehicle configuration. (lbf/mph)	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TargetSetCoefficientDetails	SetCoefficientBValue	1	1..# of selected test procedures per Test Vehicle Configuration	N(6,5)	Decimal			6	5	-9.99999	9.99999
VI-46	Set Coefficient C	EPA derived or manufacturer supplied set C-term coefficient from dynamometer force vs. velocity equation for this test vehicle configuration. (lbf/mph**2)	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails/ TargetSetCoefficientDetails	SetCoefficientCValue	1	1..# of selected test procedures per Test Vehicle Configuration	N(7,6)	Decimal			7	6	-9.999999	9.999999
VI-47	Test vehicle comments	Enter any additional comments about this test vehicle configuration.	TestVehicleInformationSubmission/ TestVehicleInformationDetails/ VehicleConfigurationDetails	ManufacturerCommentText	0	1 per Test Vehicle Configuration	A(1000)	String	1	1000				

Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
N = New dataset C = Correction of existing Verify dataset	Light-Duty	Certification Test Data		Manufacturer	Front End	XML	LD-CTD-VI-BR030 LD-CTD-VI-BR031
	Light-Duty	Certification Test Data		Verify	Front end	XML	LD-CTD-VI-BR031
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR002 LD-CTD-VI-BR031
	Light-Duty	Certification Test Data	If VI-3 NEW then done in DB and do not validate. If CORRECTION/UPDATE then Mfr Code, Vehicle ID, and Vehicle Configuration Number must exist in DB.	Verify if New, otherwise Manufacturer	Back-end if New Front end if not New	Assigned if New, otherwise XML	LD-CTD-VI-BR002 LD-CTD-VI-BR028 LD-CTD-VI-BR029 LD-CTD-VI-BR031
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR005 LD-CTD-VI-BR007 LD-CTD-VI-BR008
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR004 LD-CTD-VI-BR006 LD-CTD-VI-BR009
	Light Duty	Certification	Letters in the Leak Family Identifier must be uppercase.	Manufacturer	Front End	XML	
	Light Duty	Certification	Create a Leak Family Name when Leak Family Identifier (VI-6.5) is not null.	Verify	Back-End	Assigned	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR003 LD-CTD-VI-BR004

	Light-Duty	Certification Test Data	This change must be made on Verify front end and back end web screens	Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data	This change must be made on Verify front end and back end web screens	Manufacturer	Front end	XML	
C = Combustion Engine E = Electric Motor	Light Duty	Certification Test Data	This field is totally new in VI (however it already exists in the Test Group dataset but the enumeration value of "H-Hybrid" is being deleted in all datasets). For model years <2012, this field should be mapped from other existing fields which is why it is a required field. NEW BE Verify Assigned Rule: If Drive Source (VI-10.5) is equal to 'Combustion Engine' and 'Electric Motor' then Hybrid Indicator (VI-10.6) equals "Yes", otherwise it equals "No".	Manufacturer	Front End	XML	
N - No Y - Yes	Light Duty	Certification Test Data	For model years <2012, this field should be mapped from other existing fields which is why it is a required field.	Verify	Back End	Assigned	LD-CTD-VI-BE001
G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity HYD - Hydraulic	Light-Duty	Certification Test Data	For model years <2012, this field should be mapped from Fuel1 and Fuel2 fields which is why it is a required field. LD-CTD-VI-IB001: BE Verify Assigned BR - The selected value for Fuel(s) (VI-11.1) is not a valid value.	Manufacturer	Front end	XML	LD-CTD-VI-BR032 LD-CTD-VI-BR033 LD-CTD-VI-BR034 LD-CTD-VI-IBR008 VI-BR11
S - Fuels Stored Separately T - Fuels Stored Together	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR035a LD-CTD-VI-BR035b
S- Fuels Combusted Separately T- Fuels Combusted Together	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR036
N - No Y - Yes	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR037
N - No Y - Yes	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR038
B = Battery(s) C = Capacitor OT = Other	Light Duty	Certification		Manufacturer	Front End	XML	LD-CTD-VI-BR039
	Light Duty	Certification		Manufacturer	Front End	XML	LD-CTD-VI-BR040

N - No Y - Yes	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR041
4 = 4-wheel Drive F = 2-wheel Drive, front R = 2-wheel drive, rear P= Part-time 4-wheel drive A = All wheel drive	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
1 - Not equipped 2 - Equipped, not shifted by SIL 3 - Equipped, shifted by SIL 5 - Equipped, shifted by survey schedule.	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
4 = No aged components, 4k emission or fuel economy data vehicle was used 50 = 50k aged components used on test vehicle 100 = 100k 120 = 120k 150 = 150k	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
'+' = System Miles= (Test odometer reading *Correction factor) + Initial system miles, '-' = System miles = (Test odometer reading - initial system miles) * Correction factor.	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
M =Miles K = Kilometers	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
NA=Naturally aspirated TC=Turbocharged SC=Supercharged TS=Turbocharged+Supercharged OT=Other	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR013

	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR014 LD-CTD-VI-BR015 LD-CTD-VI-BR017 LD-CTD-VI-BR018
N=Single P=Parallel S=Series PS=Both Parallel and Series	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR016
A=Air L=Liquid N=N/A	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR025
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR019 LD-CTD-VI-BR020
1000, 1125, 1250, 1375, 1500, 1625, 1750, 1875, 2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875, 3000, 3125, 3250, 3375, 3500, 3625, 3750, 3875, 4000, 4250, 4500, 4750, 5000, 5250, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500,10000, 10500, 11000, 11500, 12000, 12500, 13000, 13500, 14000	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR019
	Light-Duty	Certification Test Data	This field should be system generated. ALVW is defined as the average of the vehicle curb weight and the gross vehicle weight.	Verify	Back end	Assigned	
	Light-Duty	Certification Test Data	This field should be system generated. LVW is defined as the vehicle curb weight + 300 pounds.	Verify	Back end	Assigned	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR020
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	

A = Automatic AM = Automated Manual M = Manual SA = Semi-Automatic CVT= Continuously Variable SCV=Selectable Continuously Variable (e.g. CVT with paddles) AMS= Automated Manual- Selectable (e.g. Automated Manual with paddles) OT = Other	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR023 LD-FE-GL-BR093 LD-CTD-VI-BR021
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR021
Y=Yes N=No	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR022
Y=Yes N=No	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR024
(Need to change the enumeration list in the schema.) C-H-E = City/Highway/Evap Cold-CO = Cold CO US06 = US06	Light-Duty	Certification Test Data	Need to add a column to the test procedure table that will be used to cross reference each test procedure to the 3 test procedure dyno coefficients categories. This will be used for EPA confirmatory testing to select the correct target and set coefficients depending on which test procedure is going to be conducted by the lab.	Manufacturer	Front end	XML	LD-CFT-SI-BR030 LD-CFT-SI-BR031 LD-CFT-SI-BR032 LD-CFT-SI-BR037
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CFT-SI-BR030 LD-CFT-SI-BR031 LD-CFT-SI-BR032 LD-CFT-SI-BR033 LD-CFT-SI-BR037
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CFT-SI-BR030 LD-CFT-SI-BR031 LD-CFT-SI-BR032 LD-CFT-SI-BR033 LD-CFT-SI-BR037
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CFT-SI-BR030 LD-CFT-SI-BR031 LD-CFT-SI-BR033 LD-CFT-SI-BR034 LD-CFT-SI-BR037

Light Duty	Certification Test Data	Verify will use the following equations for City/Highway/Evap Coefficients: Total Road Load Horsepower = (A + 50xB + 2500xC) / 7.5 Where: A=Target Coefficient A (VI-41), B=Target Coefficient B (VI-42), C=Target Coefficient C (VI-43) ASTM Rounded to 1 decimal place	Verify	Back End		LD-CTD-VI-BR042
Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CFT-SI-BR030 LD-CFT-SI-BR031 LD-CFT-SI-BR032 LD-CFT-SI-BR033 LD-CFT-SI-BR037
Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CFT-SI-BR030 LD-CFT-SI-BR031 LD-CFT-SI-BR032 LD-CFT-SI-BR033 LD-CFT-SI-BR037
Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CFT-SI-BR030 LD-CFT-SI-BR031 LD-CFT-SI-BR033 LD-CFT-SI-BR034 LD-CFT-SI-BR037
Light-Duty	Certification Test Data		Manufacturer	Front end	XML	

United States Environmental Protection Agency, Office of Air and Radiation, Office of Transportation and Air Quality   Verify Light-Duty Data Requirements   Office of Transportation and Air Quality

Date   2014-September-26   July 2014

Tier 3 Update (Release 15.0)

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry
Fuel Properties		Not required for test fuel type equal to diesel, hydrogen or electric.															
FP-0.5	**Process Code**	Select the desired process code for the current submission.	FuelPropertiesSubmission/ FuelPropertiesInformationDetails	InformationProcessCode	1		A(1)	Enumeration	1	1						N = New dataset C = Correction of existing Verify dataset	Light-Duty
FP-1	**Manufacturer Code**	The 3-character alphanumeric code assigned by EPA to each manufacturer. For mfr tests- this will be derived from user's CDX user account. Otherwise, it will come from LOD Test Report data.	FuelPropertiesSubmission/ FuelPropertiesInformationDetails	EPAManufacturerCode	1		A(3)	Fixed string	3	3	[A-Z0-9]{3}						Light-Duty
FP-2	**Fuel batch ID**	Enter the assigned fuel batch ID for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetails	FuelBatchIdentifier	1		A(6)	String	1	6							Light-Duty
FP-3	**Fuel calibration number**	Enter the fuel calibration number for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetails	FuelCalibrationNumber	1		N(4)	Integer						1	9999		Light-Duty
FP-4	**Test Fuel Type**	Select the applicable test fuel type for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetails/FuelIdentificationDetails	TestFuelTypeIdentifier	1		N(2)	Enumeration								1 = INDOLENE 30 6 = EPA UNLEADED GASOLINE 7 = INDUSTRIAL UNLEADED 100 OCTANE 8 = NUMBER 1 FUEL OIL 9 = CERT DIESEL 300 PPM SULFUR 10 = NATURAL GAS 18 = CARB CERT DIESEL 7-15 PPM SULFUR 19 = FEDERAL CERT DIESEL 7-15 PPM SULFUR 22 = SPECIAL UNLEADED 91 RON 23 = CARB PHASE II GASOLINE 24 = COLD CO REGULAR (CERT) 25 = COLD CO PREMIUM (CERT) 26 = COLD CO REGULAR (TIER 2) 27 = COLD CO PREMIUM (TIER 2) 28 = COLD CO E10 REGULAR GASOLINE (TIER 3) 29 = COLD CO E10 PREMIUM GASOLINE (TIER 3) 30 = COLD CO DIESEL 7-15 PPM SULFUR 31 = METHANOL (CERT M10) 32 = METHANOL (CERT M50) 33 = METHANOL (CERT M85) 34 = METHANOL (CERT M100) 36 = E70 (70% ETHANOL 30% EPA UNLEADED GASOLINE) 37 = E10 (10% ETHANOL 90% EPA UNLEADED GASOLINE) 38 = E85 (85% ETHANOL 15% EPA UNLEADED GASOLINE) 41 = CNG 42 = LPG 43 = E10 (10% ETHANOL 90% CAL PHASE II GASOLINE) 44 = E85 (85% ETHANOL 15% CAL PHASE II GASOLINE) 45 = E70 (70% ETHANOL 30% CAL PHASE II GASOLINE) 46 = CARB LEV3 E10 REGULAR GASOLINE 47 = CARB LEV3 E10 PREMIUM GASOLINE 48 = TIER 3 E10 REGULAR GASOLINE (9 RVP@LOW ALT.) 49 = TIER 3 E10 PREMIUM GASOLINE (9 RVP@LOW ALT.) 50 = HYDROGEN 58 = TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR ONLY) 59 = TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR ONLY) 61 = TIER 2 CERT GASOLINE 62 = ELECTRICITY 71 = E100 (100% ETHANOL)	Light-Duty
FP-5	**Fuel batch calibration effective date**	Enter the calibration effective date for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetails/FuelIdentificationDetails	BatchCalibrationEffectiveDate	1		D(8)	Date			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}						Light-Duty
FP-6	**Fuel batch calibration ineffective date**	Enter the calibration ineffective date for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetails/FuelIdentificationDetails	BatchCalibrationInEffectiveDate	0		D(8)	Date			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}						Light-Duty

ID	Field name	Description	XML Path	XML Element	Req		Type	Data Type			Format			Prec	Scale	Min	Max	Valid Values / Notes	Program
FP-7	Fuel batch calibration date	Enter the calibration date for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetai ls/FuelIdentificationDetails	BatchCalibrationDate	1		D(8)	Date			[1-2]{1}[0-9] {3}[0-1]{1} [0-9]{1}[0-3] {1}[0-9]{1}								Light-Duty
FP-8	Carbon weight fraction NMHC	Enter the carbon weight fraction NMHC for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetai ls/FuelSpecificationsDetails/ CarbonWeightFractionDetails	FractionNMHCMeasure	0		N(4,3)	Decimal						4	3	0.7	0.9	0.700-0.900 Natural Gas - CWF$_{NMHC}$	Light-Duty
FP-9	Carbon weight fraction HC	Enter the carbon weight fraction HC for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetai ls/FuelSpecificationsDetails/ CarbonWeightFractionDetails	FractionHCMeasure	0		N(4,3)	Decimal						4	3	0.7	0.9	0.700-0.900 Natural Gas - CWF$_{HC/NG}$	Light-Duty
FP-10	Exhaust carbon weight fraction	Enter the exhaust carbon weight fraction for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetai ls/FuelSpecificationsDetails/ CarbonWeightFractionDetails	ExhaustFractionMeasure	0		N(4,3)	Decimal						4	3	0.8 or 0.0	1.0	0.800-1.000 (Methanol) Methanol - CWF$_{exHC}$ 0.800-1.000 (Methanol blend) Methanol blend - CWF$_{exHC}$ 0.800-1.000 (California Phase II) California Phase II - CWF$_{exHC}$ 0.000-1.000 - California Phase II - CWF$_{exHC}$	Light-Duty
FP-11	Fuel methanol volume fraction	Enter the fuel methanol volume fraction for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetai ls/FuelSpecificationsDetails	MethanolVolumeFractionMeasure	0		N(4,3)	Decimal						4	3	0.0	1.0	0.000-1.000 (Methanol) Methanol 0.000-1.000 (Methanol blend) Methanol blend.	Light-Duty
FP-12	Fuel density	Enter the fuel density for this fuel batch. Units are grams/cu. Ft.	FuelPropertiesSubmission/ FuelPropertiesInformationDetai ls/FuelSpecificationsDetails	FuelDensityMeasure	0		N(5,3)	Decimal						5	3	1.0	40.0	Units are grams/cu. Ft. for gaseous fuels 1.000-40.00 (Natural Gas) Natural Gas - D$_{NG}$ Natural Gas (Dual Fue) - D$_{NG}$, D$_{alt}$	Light-Duty
FP-13	Fuel specific gravity	Enter the fuel specific gravity for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetai ls/FuelSpecificationsDetails	SpecificGravityMeasure	0		N(4,3)	Decimal						4	3	Min of set	Max of set	0.719-0.770 (Gasoline) Gasoline - SG California Phase II - Sg$_{blend}$ 0.844-0.882 (Diesel) Diesel - NOT REQUIRED 0.790-0.800 (Methanol) Methanol - SG 0.740-0.790 (Methanol blend) Methanol blend - SG 0.723 -0.750 (California Phase II) California Phase II - Sg$_{blend}$	Light-Duty

FP-14	**Fuel net heating value**	Enter the fuel net heating value for this fuel batch in BTU/pound.	FuelPropertiesSubmission/ FuelPropertiesInformationDetails/FuelSpecificationsDetails	NetHeatingValue	0		N(6)	Integer								Min of set	Max of set	Units are BTU/Pound 018284-019000 (Gasoline) Gasoline - NHV Gasoline (dual fuel) - NHV, NHV_{pet}, NHV_g 018300-019000 (Diesel) Diesel (single fuel) - NOT REQUIRED Diesel (dual fuel) - NHV_{pet} 008000-009000 (Methanol) Methanol (single fuel) - NOT REQUIRED Methanol (dual fuel) - NHV_{alt} 008000-009000 (Methanol blend) Methanol blend (single fuel) - NOT REQUIRED Methanol blend (dual fuel) - NHV_{alt}, NHV_{50} 020000-040000 (Natural Gas) Natural Gas (single fuel) - NOT REQUIRED Natural Gas (dual fuel) - NHV_{alt} 017000-019000 (California Phase II) California Phase II - NHV_{blend}	Light-Duty
FP-15	**Fuel blend carbon weight fraction**	Enter the fuel blend carbon weight fraction for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetails/FuelSpecificationsDetails/ CarbonWeightFractionDetails	BlendFractionMeasure	0		N(4,3)	Decimal				4	3			Min of set	Max of set	0.835-0886 (Gasoline) Gasoline - CWF 0.864-0873 (Diesel) Diesel - NOT REQUIRED 0.3745-0.880 (Methanol blend) Methanol blend - CWF 0.839-0844 (California Phase II) California Phase II - CWF_{blend} 0.650-0770 (Natural gas) Natural gas - CWF_{NG} 0.835-0886 (Gasoline) Gasoline - CWF California Phase II - CWF_{blend}	Light-Duty
FP-16	**Weight fraction CO2**	Enter the CO2 weight fraction for this fuel batch.	FuelPropertiesSubmission/ FuelPropertiesInformationDetails/FuelSpecificationsDetails/ CarbonWeightFractionDetails	FractionCO2Measure	0		N(4,3)	Decimal				4	3	0.0	0.3			0.000-0.300 Natural Gas - WF_{NG}	Light-Duty

Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
Certification Test Data		Manufacturer	Front End	XML	LD-CTD-FP-BR021 LD-CTD-FP-BR023
Certification Test Data		Verify	Front end	XML	LD-CTD-FP-BR023
Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-FP-BR023
Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-FP-BR023
Certification Test Data	**New BR: If Process Code (FP-0.5) equals 'N' (New) then Test Fuel Type (FP-4) cannot equal '24' (Cold CO Regular (CERT)) or '25' (Cold CO Premium (CERT)).**	Manufacturer/ LOD	Front end	XML	LD-CTD-FP-BR024
Certification Test Data	YYYYMMDD	Manufacturer/ LOD	Front end	XML	
Certification Test Data		Manufacturer/ LOD	Front end	XML	

Certification Test Data		Manufacturer/ LOD	Front end	XML	
Certification Test Data		Manufacturer/ LOD	Front end	XML	
Certification Test Data		Manufacturer/ LOD	Front end	XML	
Certification Test Data		Manufacturer/ LOD	Front end	XML	
Certification Test Data		Manufacturer/ LOD	Front end	XML	
Certification Test Data		Manufacturer/ LOD	Front end	XML	
Certification Test Data		Manufacturer/ LOD	Front end	XML	

Certification Test Data		Manufacturer/ LOD	Front end	XML	
Certification Test Data		Manufacturer/ LOD	Front end	XML	
Certification Test Data		Manufacturer/ LOD	Front end	XML	

Tier 3 Update (Release 15.0)

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value
TI-0.5	Process Code	Select the desired process code for the current submission.	TestInformationSubmission /TestInformationDetails	InformationProcessCode	1	1 per test	A(1)	Enumeration	1	1					
TI-1	Test Number	A unique number assigned by Verify to identify this set of test info and results. Character 1 is Model Year, Characters 2 - 4 Manufacturer code, characters 5 -12 sequential test number. For the sequential test number, if it begins with 9 its an EPA test any other number is a manufacturer test.	TestInformationSubmission /TestInformationDetails	TestNumberIdentifier	0	1 per test	A(12)	Fixed String							
TI-2	LOD Test Number	For EPA confirmatory tests- a unique number assigned by LOD to identify this set of test info and results. This field will be left blank for manufacturer tests.	TestInformationSubmission /TestInformationDetails	LODTestNumberText	0	1 per test	A(20)	String	1	20					
TI-3	Manufacturer code	The 3-character alphanumeric code assigned by EPA to each manufacturer. For mfr tests- this will be derived from user's CDX user account. Otherwise, it will come from LOD Test Report data.	TestInformationSubmission /TestInformationDetails	EPAManufacturerCode	1	1 per test	A(3)	Fixed string	3	3	[A-Z0-9] {3}				
TI-4	Vehicle ID	Enter the unique alphanumeric identifier for the tested vehicle previously established in Test Vehicle Information.	TestInformationSubmission /TestInformationDetails	VehicleIdentificationText	1	1 per test	A(20)	String	1	20					

			Description	Path	Element	Min	Occurrence	Format	Data Type			Pattern			Min	Max
TI-5	**Vehicle Configuration Number**		Enter the vehicle configuration number for the tested vehicle previously established in Test Vehicle Information.	TestInformationSubmission /TestInformationDetails	VehicleConfigurationNumber	1	1 per test	N(2)	Integer						0	99
TI-6	**Test date**		Enter the date on which the test was conducted.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	TestDate	1	1 per test	D(8)	Date			[1-2]{1}[0-9]{3}[0-1] {1}[0-9] {1}[0-3] {1}[0-9] {1}				
TI-7	**Verify Test Lab ID**		Enter the applicable manufacturer test lab site code that was previously established as part of Manufacturer Information.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	TestLaboratorySiteCode	0	1 per test	N(2)	Integer						1	99
TI-8	**Test Procedure**		Enter the applicable test procedure for the test currently being submitted.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	TestProcedureIdentifier	1	1 per test	N(2)	Enumeration							

ID	Name	Description	Path	Element	Occ	Frequency	Format	Data Type					Min	Max
TI-9	**Test Fuel Type**	Enter the applicable test fuel type for this test.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	TestFuelTypeIdentifier	1	1 per test	N(2)	Enumeration						
TI-10	**Test Start Odometer reading**	Enter the odometer reading at the beginning of the test.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	OdometerStartValue	1	1 per test	N(7,1)	Decimal			7	1	0.0	999,999.9
TI-11	**Odometer units**	Enter the units of the odometer reading for this vehicle.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	CorrectionUnitsCode	1	1 per test	A(1)	Enumeration						
TI-13	**Exhaust - Evap test number link**	Required for evaporative tests. Enter the test number of the corresponding FTP exhaust test. The exhaust test must be entered prior to the evap test.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	ExhaustEvaporativeTestLinkIdentifier	0	1 per test	A(15)	String	12 ~~1~~	12 ~~15~~				
TI-13.5	**Analytically-Derived FE / CREE Indicator**	Is this test analytically derived?	TestInformationSubmission /TestInformationDetails/ TestDataDetails	AnalyticallyDerivedIndicator	1	1 per test	A(1)	Enumeration						
TI-13.6	**Analytically-Derived FE / CREE Base Verify Test Number**	If the test being submitted is an analytically-derived fuel economy/CREE test, enter the Verify Test Number upon which the analytically-derived test is based.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	AnalyticallyDerivedTestIdentifier	0	1 per test	A(12)	Fixed String	12	12				
TI-13.7	**Analytically-Derived FE / CREE - Total Road Load Horsepower**	Enter the total road load horsepower at 50 mph (TRLHP50) for the analytically derived test vehicle configuration. (The analytical vehicle not actually tested)	TestInformationSubmission /TestInformationDetails/ TestDataDetails	AnalyticallyDerivedRoadLoadHorsepowerMeasure	0	1 per Test	N(3,1)	Decimal			3	1	0	99.9
TI-13.8	**Analytically-Derived FE / CREE - ETW**	Enter the equivalent test weight, in pounds for the analytically derived test vehicle. (The analytical vehicle not actually tested)	TestInformationSubmission /TestInformationDetails/ TestDataDetails	AnalyticallyDerivedEquivalentTestWeightMeasure	0	1 per Test	N(5)	Enumeration					0	14000

						Verify Light-Duty Data Requirements											
TI-13.9	Analytically-Derived FE / CREE - N/V Ratio	Enter the applicable N/V ratio for the analytically derived test vehicle configuration. (The analytical vehicle not actually tested)	TestInformationSubmission /TestInformationDetails/ TestDataDetails	AnalyticallyDerivedNVRatioMeasure	0	1 per Test	N(4,1)	Decimal				4	1	0.0	999.9
TI-14	4WD Test Dyno	Was this test conducted on a 4WD dynomometer?	TestInformationSubmission /TestInformationDetails/ TestDataDetails	FourWheelDriveDynamometerIndicator	1	1 per test	A(1)	Enumeration							
TI-15	EPA Dyno Number	This field is only filled in for tests conducted at EPA's test lab- not for mfr tests. This information will come from the LOD Test Report data.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	EPADynamometerNumberText	0	1 per test	A(4)	String	1	4					
TI-16	Fuel Batch Manufacturer Code	Enter the manufacturer code for the owner of the fuel batch used for this test.	TestInformationSubmission /TestInformationDetails/ TestDataDetails/ FuelBatchPropertiesDetails	FuelBatchManufacturerCode	0	1 per test	A(3)	Fixed String	3	3	[A-Z0-9] {3}				
TI-17	Fuel batch ID	Enter the applicable fuel batch ID for this test.	TestInformationSubmission /TestInformationDetails/ TestDataDetails/ FuelBatchPropertiesDetails	FuelBatchIdentifier	0	1 per test	A(6)	String	1	6					
TI-18	Fuel calibration number	Enter the applicable fuel calibration number for this test.	TestInformationSubmission /TestInformationDetails/ TestDataDetails/ FuelBatchPropertiesDetails	FuelCalibrationNumber	0	1 per test	N(4)	Integer						1	9999
TI-18.5	Diesel Adjustment Factor Usage Indicator	Enter the applicable diesel adjustment factor to be used for calculation of the certification level for this test.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	DieselAdjustmentFactorUsageIndicator	0	1 per test	A(1)	Enumeration							
TI-18.8	Manufacturer Confirmatory Test Indicator	Specify whether this test is a manufacturer confirmatory test required by CAP 2000 regulations.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	ManufacturerConfirmatoryTestIndicator	0	1 per test	A(1)	Enumeration							
TI-18.9	Original Manufacturer Verify Test Number That Was Confirmed	Enter the original Verify test number that was confirmed by this test.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	OriginalManufacturerConfirmedTestIdentifier	0	1 per test	A(12)	Fixed String	12	12					
TI-22	Retest indicator	"Yes" is entered any time this test is a retest of a previous test	TestInformationSubmission /TestInformationDetails/ TestDataDetails	RetestIndicator	1	1 per test	A(1)	Enumeration							
TI-22.1	Manufacturer Verify Test Number That Was Retested	Enter the Verify test number that required this retest.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	ManufacturerRetestTestNumberIdentifier	0	1 per test	A(12)	Fixed String	12	12					
TI-23	Retest Reason	Enter the reason for conducting this re-test.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	RetestReasonIdentifier	0	1 per test	N(2)	Enumeration							
TI-24	State of Charge Delta Indicator	Does the state of charge meet EPA's end of test criteria? This is required for Hybrid and Fuel Cell vehicles.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	ChargeStateDeltaIndicator	0	1 per test	A(1)	Enumeration							

TI-24.5	**E10 Evaporative Test Measurement Method**	Enter E10 Measurement Method to be used for Running Loss and 2-Day/3-Day Hot Soak + Diurnal emissions only (e.g. for Tier 3/LEVIII tests). Method must agree with all Evaporative tests used for the tested Evaporative Family.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	E10EvaporativeTestMeas urementMethodIdentifier	0	1 per test	A(7)	Enumeration						
TI-24.6	**Drive Cycle Speed Tolerance Criteria**	Select the applicable value for Drive Cycle Speed Tolerance Criteria.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	DriveCycleSpeedToleran ceCriteriaIdentifier	1	1 per test	A(8)	Enumeration						
TI-24.8	**Road Speed Fan Usage Indicator**	Was a road speed fan used for this test? Manufacturers must have prior EPA approval in order to enter 'Yes'.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	RoadSpeedFanUsageIndi cator	1	1 per test	A(1)	Enumeration						
TI-25	**Test Comments**	Enter any additional comments about this test.	TestInformationSubmission /TestInformationDetails/ TestDataDetails	ManufacturerCommentTe xt	0	1 per test	A(1000)	String	1	1000				
PHEV Test Information Only (Test Procedure = Charge Depleting UDDS, Highway, US06)														
TI-18.1	**Number of UDDS/Highway/US06 Bags/Phases Conducted**	Enter the number of UDDS/Highway/US06 bags/phases conducted for this test.	TestInformationSubmission /TestInformationDetails/ PHEVChargeDepletingTest InformationDetails	TestBagPhaseCount	0	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(2)	Integer					1	99
TI-18.2	**UDDS/Highway/US06 Bag/Phase Number**	Verify-assigned number for each UDDS/Highway/US06 Bag/Phase for this test.	TestInformationSubmission /TestInformationDetails/ PHEVChargeDepletingTest InformationDetails/ PHEVChargeDepletingBag PhaseDetails	TestBagPhaseNumber	0	1 .. Number of UDDS/Highway/ US06 Cycles Conducted	N(2)	Integer					1	99
TI-18.3	**Recharge Event Voltage**	Enter the actual measured input AC voltage to the charger for this test.	TestInformationSubmission /TestInformationDetails/ PHEVChargeDepletingTest InformationDetails	RechargeEventVoltageM easure	0	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(4,1)	Decimal			4	1	0	999.9

ID	Name	Description	XML Path	Element		Requirement	Format	Type							
TI-18.4	Recharge Event Energy (kiloWatt-hours)	Enter the actual measured energy (kiloWatt-hours) input to the charger to recharge the vehicle battery for this test.	TestInformationSubmission /TestInformationDetails/ PHEVChargeDepletingTest InformationDetails	RechargeEventEnergyMe asure	0	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(7,4)	Decimal				7	4	0	999.9999
TI-18.6.1	Charge Depleting Range (Calculated miles)	Enter the calculated charge depleting driving range (in miles) as required by 40 CFR XXX.	TestInformationSubmission /TestInformationDetails/ PHEVChargeDepletingTest InformationDetails	CalculatedChargeDepleti onRangeMeasure	0	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(6,3)	Decimal				6	3	0	999.999
TI-18.6	Charge Depleting Range (Actual miles)	Enter the actual measured charge depleting driving range (in miles) as required by 40 CFR XXX.	TestInformationSubmission /TestInformationDetails/ PHEVChargeDepletingTest InformationDetails	ChargeDepletionRangeM easure	0	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(6,3)	Decimal				6	3	0	999.999
TI-18.7	Equivalent All Electric Range (miles)	Enter the equivalent all electric range as required by California ARB's ZEV procedure.	TestInformationSubmission /TestInformationDetails/ PHEVChargeDepletingTest InformationDetails	EquivalentElectricRange Measure	0	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(6,3)	Decimal				6	3	0	999.999
TI-19	Test Result/Emission Name	Enter all applicable test result names (and unrounded test results) for this test. Note the list of test result names includes possible fuel economy test results also. 'CREE' or 'OPT-CREE' values are required in the Charge Depleting Bag / Phase #1 section. Otherwise, they are optional.

The three Drive Trace fields are required when Model Year is greater than 2014 and when Test Category equals FTP, US06, SC03, HWY, or CD for both charge sustaining and charge depleting tests. Enter the weighted value of all bags for FTP tests and enter only the bag 2 value for US06 tests. | TestInformationSubmission /TestInformationDetails/ TestDataDetails/ EmissionTestDetails | TestResultIdentifier | 1 | 1..Total # of Test Result Names in Enumeration List per UDDS Cycle Number (if Test Procedure equals Charge Depleting UDDS, Highway, US06) else 1..Total # of Test Result/Emission Names in Enumeration List | A(16) | Enumeration | | | | | | | |

TI-19	**Test Result/Emission Name- Continued**														
TI-19	**Test Result/Emission Name- Continued**														

ID	Name	Description	XPath	Element	Min	Occurrence	Format	Type				Length	Decimals	Min Value	Max Value
TI-20	**Unrounded Test Result**	Enter the unrounded test result for each emission name for this test. Exhaust emission results and running losses must be in units of grams per mile. Evaporative emission results must be in units of grams per test. ORVR must be in units of grams per gallon of fuel dispensed.	TestInformationSubmission /TestInformationDetails/ TestDataDetails/ EmissionTestDetails	UnroundedResultValue	1	1..Total # of Test Result Names in Enumeration List per UDDS Cycle Number (if Test Procedure equals Charge Depleting UDDS, Highway, US06) else 1..Total # of Test Result/Emission Names in Enumeration List	N(11,7)	Decimal				11	7	-99.99	9999.9999999
TI-20.5	**Fuel Economy Value Unit**	Enter the applicable unit of measure for the entered fuel economy value(s). CNG vehicles should select fuel economy units of "MPG".	TestInformationSubmission /TestInformationDetails/ TestDataDetails	FuelEconomyValueUnitId entifier	0	1 per Test	A(8)	Enumeration	3	8					
TI-20.6	**Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value**	Verify will calculate the mile per gallon equivalent for non-MPG fuel economy values	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedEmissionTe stDetails	FuelEconomyMPGEquiva lentValue	0	1 per Test Result/Emission Name	N(11,7)	Decimal				11	7	0	9999.9999999
EPA Confirmatory Test Exhaust Emission Cert Level Information															
TI-38	**Rounded Emission Result**	Verify will round the unrounded test results for each EPA Confirmatory Test test number/emission name combination to the same number of digits plus one digit as the corresponding emission standard (that was entered in CT Supplemental Info). Each rounded result will then have the DF applied (that was entered in CT Supplemental Info) to calculate the official certification levels.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedEmissionTe stDetails	UnroundedResultValue	0	1 for each provided unrounded emission result (via test number) for which a corresponding emission standard is provided on the CT Supplemental Information.	N(11,7)	Decimal				11	7	0	9999.9999999
TI 19.1	**Unrounded Unadjusted CREE**	Verify-calculated carbon-related exhaust emissions value (or optional carbon-related exhaust emissions value) without deterioration factors applied.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedCarbonRelat edExhaustEmissionDetails	UnroundedUnadjusted7V alue	0	1 per Test Result/Emission Name	N(11,7)	Decimal				11	7	0	9999.9999999

ID	Name	Description	XML Path	Field Name		Frequency	Format	Data Type								Valid Value
TI 19.2	**Rounded Unadjusted CREE**	Verify-calculated carbon-related exhaust emissions value (or optional carbon-related exhaust emissions value) without deterioration factors applied.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedCarbonRelat edExhaustEmissionDetails	RoundedUnadjustedValu e	0	1 per Test Result/Emission Name	N(4,0)	Decimal				4	0	0	9999
TI 19.3	**Unrounded Adjusted CREE**	Verify-calculated carbon-related exhaust emissions value (or optional carbon-related exhaust emissions value) without deterioration factors applied.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedCarbonRelat edExhaustEmissionDetails	UnroundedAdjusted7Valu e	0	1 per Test Result/Emission Name	N(11,7)	Decimal				11	7	0	9999.9999999
TI 19.4	**Rounded Adjusted CREE**	Verify-calculated carbon-related exhaust emissions value (or optional carbon-related exhaust emissions value) without deterioration factors applied.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedCarbonRelat edExhaustEmissionDetails	RoundedAdjustedValue	0	1 per Test Result/Emission Name	N(4,0)	Decimal				4	0	0	9999
TI 19.5	**Unrounded Unadjusted OPT-CREE**	Verify-calculated optional carbon-related exhaust emissions value without deterioration factors applied.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedOptionalCar bonRelatedExhaustEmissio nDetails	UnroundedUnadjusted7V alue	0	1 per Test Result/Emission Name	N(11,7)	Decimal				11	7	0	9999.9999999
TI 19.6	**Rounded Unadjusted OPT-CREE**	Verify-calculated optional carbon-related exhaust emissions value without deterioration factors applied.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedOptionalCar bonRelatedExhaustEmissio nDetails	RoundedUnadjustedValu e	0	1 per Test Result/Emission Name	N(4,0)	Decimal				4	0	0	9999
TI 19.7	**Unrounded Adjusted OPT-CREE**	Verify-calculated optional carbon-related exhaust emissions value without deterioration factors applied.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedOptionalCar bonRelatedExhaustEmissio nDetails	UnroundedAdjusted7Valu e	0	1 per Test Result/Emission Name	N(11,7)	Decimal				11	7	0	9999.9999999
TI 19.8	**Rounded Adjusted OPT-CREE**	Verify-calculated optional carbon-related exhaust emissions value with outdeterioration factors applied.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedOptionalCar bonRelatedExhaustEmissio nDetails	RoundedAdjustedValue	0	1 per Test Result/Emission Name	N(4,0)	Decimal				4	0	0	9999
TI-39	**Certification Level**	Verify will calculate cert levels for EPA confirmatory tests by applying the DF submitted in the Supplemental Information dataset to each rounded emission result.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedExhaustDet ails	CalculatedCertificationLe velValue	0	1 for each calculated Rounded Emission Result	N(8,4)	Decimal				8	4	0	9999.9999 (note- one additional digit was added to the left of the decimal)

ID	Name	Description	XPath	Element	Default	Occurrence	Format	Type			Total	Decimal	Min	Example
TI-40	**Certification Disposition Code**	For EPA confirmatory tests, Verify will compare the Calculated Cert Level with the corresponding standard entered in the CT Supplemental Information and will set the Certification Disposition Code to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail".	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedExhaustDet ails	CertificationDispositionCo de	0	1 for each calculated Cert Level	A(4)	Enumeration						
	Evap Emission Cert Level Information													
TI-41	**Rounded Emission Result**	Verify will round the unrounded test results for each CSI test number/emission name combination to the same number of digits as the corresponding emission standard plus one digit. Each rounded result will then have the DF applied to calculate the official certification levels.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedEvaporative Details	RoundedEmissionResult Value	0	1 for each provided unrounded emission result (via test number) for which a corresponding emission standard is provided on the CSI.	N(11,7)	Decimal			11	7	0	9999.9999999
TI-42	**Cert Level**	Verify will calculate cert levels by applying the DF to each rounded emission result.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedEvaporative Details	CalculatedCertificationLe velValue	0	1 for each calculated Rounded Emission Result	N(8,4)	Decimal			8	4	0	9999.9999 (note- one additional digit was added to the left of the decimal)
TI-21	**Certification disposition code**	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Certification Disposition Code to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail". Verify calculated for EPA confirmatory tests only.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails/ EPAGeneratedEvaporative Details	CertificationDispositionCo de	0	1 for each calculated Cert Level	A(4)	Enumeration						
	Test Procedure Reference Table- This will be used to make sure each CSI (test group/evap family combination) includes at least one test number for each required test cateogry.													

Verify Light-Duty Data Requirements

TI-43	**Test Category**	This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails	TestCategoryIdentifier	1	1 per test procedure	A(6)	Enumeration									
TI-44	**Test Fuel Category**	This field will automatically be filled based on the Test Fuel Type (TI-9) in "Test" section) associated with the test number. A valid test number is required for these fuel categories.	TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails	TestFuelCategoryIdentifie r	1	1 per test fuel type	A(3)	Enumeration									
TI-45	**Test 5-Cycle Category**		TestInformationSubmission /TestInformationDetails/ EPAGeneratedTestInformat ionDetails	Test5CycleCategoryIdenti fier	1	1 per test procedure	A(5)	Enumeration									

2.65/

Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
N = New dataset C = Correction of existing Verify dataset	Light-Duty	Certification Test Data		Manufacturer/ LOD	Front End	XML	LD-CTD-TI-BR027 LD-CTD-TI-BR080
	Light-Duty	Certification Test Data		Verify if New, otherwise Manufacturer	Back-end if New Front end if not New	Assigned if New, otherwise XML	LD-CTD-TI-BR002a LD-CTD-TI-BR002b LD-CTD-TI-BR030 LD-CTD-TI-BR031 LD-CTD-TI-BR036 LD-CTD-TI-BR080
	Light-Duty	Certification Test Data		LOD	Front end	XML	LD-CTD-TI-BR004
	Light-Duty	Certification Test Data		Verify/LOD	Front end	XML	LD-CTD-TI-BR001 LD-CTD-TI-BR003 LD-CTD-TI-BR017 LD-CTD-TI-BR029 LD-CTD-TI-BR066 LD-CTD-TI-BR072
	Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR003 LD-CTD-TI-BR066 LD-CTD-TI-BR072 LD-FE-CA-BR166 LD-FE-CA-BR167 LD-FE-CA-BR181 LD-FE-CA-BR182 LD-FE-GL-BR080 LD-FE-GL-BR081 LD-FE-GL-BR082 LD-FE-GL-BR083 LD-FE-GL-BR084 LD-FE-GL-BR090 LD-FE-GL-BR091

Verify Light-Duty Data Requirements

	Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR003 LD-CTD-TI-BR066 LD-CTD-TI-BR072 LD-FE-CA-BR166 LD-FE-CA-BR167 LD-FE-CA-BR181 LD-FE-CA-BR182 LD-FE-GL-BR080 LD-FE-GL-BR081 LD-FE-GL-BR082 LD-FE-GL-BR083 LD-FE-GL-BR084 LD-FE-GL-BR090 LD-FE-GL-BR091
	Light-Duty	Certification Test Data	YYYYMMDD	Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR005 LD-CTD-TI-BR042 LD-CTD-TI-BR061
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR006
2 = CVS 75 AND LATER (W/O CAN. LOAD) 3 = HWFE (HIGHWAY TEST) 9 = HWY80 (80 MPH HIGHWAY TEST) 10 = IDLE CO 11 = COLD CO 15 = SPITBACK TEST 16 = Hot 1435 LA92 21 = FED FUEL 2 DAY EXH (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (ORVR) (BUTANE) 25 = CA FUEL 2 DAY EXH (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EXH (BUTANE LOAD) 32 - FED FUEL RUNNING LOSS 34 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 35 = CA FUEL 3 DAY EXH (BUTANE LOAD) 37 = CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EXH(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (ORVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EXH (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEG(F) EXHAUST TEST 52 = FED FUEL 50 DEG(F) EXHAUST TEST 60 = AC17 - MANUAL A/C CONTROLS 61 = AC17 - AUTOMATIC A/C CONTROLS 64 = EVAP CARB FUEL ONLY (RIG) TEST 65 = EVAP CANISTER BLEED TEST 66 = LEAK TEST - EVAP FUEL SYSTEM OBD 67 = LEAK TEST - PORT NEAR CANISTER 68 = LEAK TEST - PORT NEAR FUEL PIPE 69 = LEAK TEST - EVAP GAS CAP 72 = CST TWO SPEED IDLE TEST 76 = CST PRECD 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 83 = Charge Depleting US06 84 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 20 Degree F FTP 87 = A/C Idle Test- Manual A/C 88 = A/C Idle Test- Automatic A/C 90 = US06 95 = SC03 96 = US06 Bag 2 Only	Light-Duty	Certification Test Data	Test Procedure Codes 80 (5-Cycle City Raw Test Bag Data) and 82 (5-Cycle Hwy Raw Test Bag Data) do not exist in Verify, but they did in CFEIS so they are reserved in the event that we someday migrate CFEIS data into Verify. However, *if* we do have them in the TEST_PROC table then 80 would have the Test Category of 'FTP' and 82 would be 'HWY'. If they aren't in the TEST_PROC table, then there's no need to give them Test Categories.	Manufacturer/ LOD	Front end	XML	LD-CERT-TG-BR186 LD-CERT-TG-BR187 LD-CFT-DI-BR020 LD-CTD-TI-BR043 LD-CTD-TI-BR066 LD-CTD-TI-BR075 LD-CTD-TI-IB003 LD-FE-GL-BR080 LD-FE-GL-BR081 LD-FE-GL-BR082 LD-FE-GL-BR083 LD-FE-GL-BR084

Verify Light-Duty Data Requirements

6 = EPA UNLEADED GASOLINE 7 = INDUSTRIAL UNLEADED 100 OCTANE 8 = NUMBER 1 FUEL OIL 9 = CERT DIESEL 300 PPM SULFUR 10 = NATURAL GAS 18 = CARB CERT DIESEL 7-15 PPM SULFUR 19 = FEDERAL CERT DIESEL 7-15 PPM SULFUR 22 = SPECIAL UNLEADED 91 RON 23 = CARB PHASE II GASOLINE 24 = COLD CO REGULAR (CERT) 25 = COLD CO PREMIUM (CERT) 26 = COLD CO REGULAR (TIER 2) 27 = COLD CO PREMIUM (TIER 2) 28 = COLD CO E10 REGULAR GASOLINE (TIER 3) 29 = COLD CO E10 PREMIUM GASOLINE (TIER 3) 30 = COLD CO DIESEL 7-15 PPM SULFUR 31 = METHANOL (CERT M10) 32 = METHANOL (CERT M50) 33 = METHANOL (CERT M85) 34 = METHANOL (CERT M100) 36 = E70 (70% ETHANOL 30% EPA UNLEADED GASOLINE) 37 = E10 (10% ETHANOL 90% EPA UNLEADED GASOLINE) 38 = E85 (85% ETHANOL 15% EPA UNLEADED GASOLINE) 41 = CNG 42 = LPG 43 = E10 (10% ETHANOL 90% CAL PHASE II GASOLINE) 44 = E85 (85% ETHANOL 15% CAL PHASE II GASOLINE) 45 = E70 (70% ETHANOL 30% CAL PHASE II GASOLINE) 46 = CARB LEV3 E10 REGULAR GASOLINE 47 = CARB LEV3 E10 PREMIUM GASOLINE 48 = TIER 3 E10 REGULAR GASOLINE (9 RVP @LOW ALT.) 49 = TIER 3 E10 PREMIUM GASOLINE (9 RVP @LOW ALT.) 50 = HYDROGEN 58 = TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR ONLY) 59 = TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR ONLY) 61 = TIER 2 CERT GASOLINE 62 = ELECTRICITY 71 = E100 (100% ETHANOL)	Light-Duty	Certification Test Data	New BR: If Process Code (FP-0.5) equals 'N' (New) then Test Fuel Type (FP-4) cannot equal '24' (Cold CO Regular (CERT)) or '25' (Cold CO Premium (CERT)).	Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR066 LD-CTD-TI-BR074 LD-CTD-TI-BR085 LD-CTD-TI-BR086
	Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	
M - Miles K - Kilometers	Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR008a LD-CTD-TI-BR008b
N=No Y=Yes	Light Duty	Certification Test Data		Manufacturer	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR053 LD-CTD-TI-BR054 LD-CTD-TI-BR055 LD-CTD-TI-BR072 LD-CTD-TI-BR073 LD-CTD-TI-BR074 LD-CTD-TI-BR075
	Light Duty	Certification Test Data		Manufacturer	Front End	XML	LD-CTD-TI-BR056
1000, 1125, 1250, 1375, 1500, 1625, 1750, 1875, 2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875, 3000, 3125, 3250, 3375, 3500, 3625, 3750, 3875, 4000, 4250, 4500, 4750, 5000, 5250, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500,10000, 10500, 11000, 11500, 12000, 12500, 13000, 13500, 14000	Light-Duty	Certification Test Data	(Same enumeration list as ETW (VI-30) from VI dataset)	Manufacturer	Front end	XML	LD-CTD-TI-BR057 LD-CTD-TI-IB001

				Verify Light-Duty Data Requirements				
		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR058
Y = Yes N = No		Light-Duty	Certification Test Data	New: Need to send this to the lab via the stored procedure that gets triggered to compile test and vehicle information after Supplemental Info is submitted and aceepted. It should be appended to the end of the record that gets written to	Manufacturer/ LOD	Front end	XML	
		Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	
		Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR009 LD-CTD-TI-BR073
		Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR009 LD-CTD-TI-BR073
		Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR009 LD-CTD-TI-BR073
U = Upward D = Downward					Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR028 LD-CTD-TI-BR064a LD-CTD-TI-BR064b
Y = Yes N = No		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR059
		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR060 LD-CTD-TI-BR061 LD-CTD-TI-BR062
Y = Yes N = No		Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR063
		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR041 LD-CTD-TI-BR042
1 - Failed (F) 2 - Void (V) 3 - FE (FE) 4 - Unrepresentative (U) 99 - Other (OT)		Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-TI-IB004
Y = Yes N = No		Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR046

			Request table which is triggered by SI submission. New BRs: If the Test Fuel Type (TI-9) equals '46' (CARB LEV3 E10 REGULAR GASOLINE), '47' (CARB LEV3 E10 PREMIUM GASOLINE), '48' (TIER 3 E10 REGULAR GASOLINE), or '49' (TIER 3 E10 PREMIUM GASOLINE) AND the Test Procedure (TI-8) equals '23' (FED FUEL 2 DAY EVAP (BUTANE)), '27' (CA FUEL 2 DAY EVAP (BUTANE LOAD)), '32' (FED FUEL RUNNING LOSS), '34' (FED FUEL 3 DAY EVAP(BUTANE LOAD)), '37' ('CA FUEL RUNNING LOSS'), '38' (CA FUEL 3 DAY EVAP (BUTANE LOAD)), '43' (FED FUEL 2DAY EVAP(HEAT TO LOAD)), '47' (CA FUEL 2 DAY EVAP(HEAT TO LOAD)), '58' (TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR Only)), or '59' (TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR Only)), then E10 Evaporative Test Measurement Method (TI-24.5) is required.				
ACTUAL = Actual Total Hydrocarbon Equivalent Measurement (with speciation) CALC = Calculated (1.08 x FID Total Hydrocarbons) FID-EPA = Actual FID w/o Speciation (EPA Only)	Light Duty	Certification Test Data	If the Submitting Manufacturer Code is not 'LOD' or 'EPA' then E10 Evaporative Test Measurement Method (TI-24.5) cannot equal 'FID-EPA'. If the Submitting Manufacturer Code is 'LOD' or 'EPA' then E10 Evaporative Test Measurement Method (TI-24.5) must either match the E10 Evaporative Test Measurement Method (TI-24.5) for the test specified Test Number (DI-17.5) by the manufacturer for the corresponding test procedure/test fuel type combination in Decision Information, or, must equal 'FID-EPA' (Actual FID w/o Speciation (EPA Only)).	Manufacturer/ LOD	Front End	XML	LD-CTD-TI-BR087 LD-CTD-TI-BR088 LD-CTD-TI-BR089
PART86 = Used Part 86 (+/- 2 mph, +/- 1 sec) PART1066 = Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Light Duty	Confirmatory Test	****Add this to the LOD STARDATA Test Request table which is written to upon SI submission.	Manufacturer/ LOD	Front End	XML	
Y = Yes N = No	Light Duty	Certification Test Data	****Send this to the LOD STARDATA Test Request table which is triggered by SI submission.	Manufacturer/ LOD	Front End	XML	
	Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR064b
	Light-Duty	Certification Test Data		Verify	Front end	XML	LD-CTD-TI-BR064b
	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR064a LD-CTD-TI-BR064b LD-CTD-TI-BR065

			Verify Light-Duty Data Requirements			
Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR064b
Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR064b
Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR064b
Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR064b
HC-TOTAL (Total Hydrocarbon) HC-TOTAL-EQUIV (Total Hydrocarbon Equivalent - Evap Only) CO (Carbon Monoxide) CO2 (Carbon Dioxide) CREE (Carbon-Related Exhaust Emissions) OPT-CREE (Optional Carbon-Related Exhaust Emissions) NOX (Nitrogen Oxides) PM (Particulate Matter) PM-COMP (SFTP Composite Particulate Matter) HC-NM (Non-methane Hydrocarbon) OMHCE (Organic material Hydrocarbon equivalent) OMNMHCE (Organic material non-methane Hydrocarbon equivalent) NMOG (Non-methane organic gases (California)) HCHO (Formaldehyde) H3C2HO (Acetaldehyde) HC-NM+NOX (SFTP Non-methane Hydrocarbon+Nitrogen Oxides for US06 or SC03) HC-NM+NOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides) CO-COMP (SFTP Composite Carbon Monoxide) NMOG+NOX (Non-methane Organic Gases Plus Nitrogen Oxides) NMOG+NOX-COMP (SFTP Composite Non-methane Organic Gases Plus Nitrogen Oxides) ETHANOL (C2H5OH- Ethanol) FE BAG 1 (Bag 1 Fuel Economy) FE BAG 2 (Bag 2 Fuel Economy) FE BAG 3 (Bag 3 Fuel Economy) FE BAG 4 (Bag 4 Fuel Economy) CO2 BAG 1 (Bag 1 Carbon Dioxide) CO2 BAG 2 (Bag 2 Carbon Dioxide) CO2 BAG 3 (Bag 3 Carbon Dioxide) CO2 BAG 4 (Bag 4 Carbon Dioxide) MFR FE (Manufacturer Fuel Economy) HC (Hydrocarbon for Running Loss and ORVR) METHANE (CH4) (Methane) METHANE-COMB (Combined CH4 for HD 2b/3 Vehicles Only) METHANOL (CH3OH) (Methanol) N2O (Nitrous Oxide) N2O-COMB (Combined Nitrous Oxide for HD 2b/3 Vehicles Only) SPITBACK (Spitback Hydrocarbon in grams) DT-IWRR (Drive Trace Inertia Work Ratio Rating) DT-ASCR (Drive Trace Absolute Speed Change Rating) DT-EER (Drive Trace Energy Economy Rating) LEAK-DIA (Effective Leak Diameter (inches)) LEAK-GAS CAP (Gas Cap Leakage (cc/min)) Allowed For Charge Depleting Test Procedures Only: AMP-HRS (Integrated Amp-hours) START-SOC (System Start State of Charge Watt-hours) END-SOC (System End State of Charge Watt-hours) ACT-DISTANCE (Actual Distance Driven (miles)) AS-VOLT (Average System Voltage)		New Business Rules: If Test Procedure (TI-8) = '65' (Evap Canister Bleed Test), '66' (Leak Test - Evap Fuel System OBD), '67' (Leak Test - Port Near Canister) or '68' (Leak Test - Port Near Fuel Pipe) then Test Result/Emission Name (TI-19) must only equal 'LEAK-DIA' (Effective Leak Diameter). If Test Procedure (TI-8) = '69' (Leak Test - Evap Gas Cap) then Test Result/Emission Name (TI-19) must only equal 'LEAK-GAS CAP' (Gas Cap Leakage). If the Fuel Type (TI-9) equals '46' (CARB LEV3 E10 REGULAR GASOLINE), '47' (CARB LEV3 E10 PREMIUM GASOLINE), '48' (TIER 3 E10 REGULAR GASOLINE), or '49' (TIER 3 E10 PREMIUM GASOLINE) AND the Test Procedure (TI-8) equals '23' (FED FUEL 2 DAY EVAP (BUTANE)), '27' (CA FUEL 2 DAY EVAP (BUTANE LOAD)), '32' (FED FUEL RUNNING LOSS), '34' (FED FUEL 3 DAY EVAP(BUTANE LOAD)), '37' ('CA FUEL RUNNING LOSS'), '38' (CA FUEL 3 DAY EVAP (BUTANE LOAD)), '43' (FED FUEL 2DAY EVAP(HEAT TO LOAD)), '47' (CA FUEL 2 DAY EVAP(HEAT TO LOAD)), '58' (TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR Only)), or '59' (TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR Only)), then Test Result/Emission Name (TI-19) must include 'HC-TOTAL-EQUIV'. If Test Procedure (TI-8) is not equal to '2' (CVS 75 AND LATER (W/O CAN. LOAD)), '21' (FED FUEL 2 DAY EXH (BUTANE LOAD)), '25' (CA FUEL 2 DAY EXH (BUTANE LOAD)), '31' (FED FUEL 3 DAY EXH (BUTANE LOAD)), '35' (CA FUEL 3 DAY EXH (BUTANE LOAD)), '41' (FED FUEL 2 DAY EXH(HEAT TO LOAD)) or '45' (CA FUEL 2 DAY EXH (HEAT TO LOAD)); then, Test Result/Emission Name (TI-19) cannot equal 'METHANE-COMB' or 'N2O-COMB'.	Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR022c LD-CTD-TI-BR022d LD-CTD-TI-BR023a LD-CTD-TI-BR023b LD-CTD-TI-BR023c LD-CTD-TI-BR023d LD-CTD-TI-BR024a LD-CTD-TI-BR024b LD-CTD-TI-BR024c LD-CTD-TI-BR024d LD-CTD-TI-BR025a LD-CTD-TI-BR025b LD-CTD-TI-BR025c LD-CTD-TI-BR025d LD-CTD-TI-BR026a LD-CTD-TI-BR026b LD-CTD-TI-BR026c LD-CTD-TI-BR026d LD-CTD-TI-BR033 LD-CTD-TI-BR034a

							TI-19 BRs Continued… LD-CTD-TI-BR035a LD-CTD-TI-BR035b LD-CTD-TI-BR037 LD-CTD-TI-BR047a LD-CTD-TI-BR047b LD-CTD-TI-BR049a LD-CTD-TI-BR049b LD-CTD-TI-BR050a LD-CTD-TI-BR050b LD-CTD-TI-BR051a LD-CTD-TI-BR051b LD-CTD-TI-BR052a LD-CTD-TI-BR052b LD-CTD-TI-BR068a LD-CTD-TI-BR068b LD-CTD-TI-BR069a LD-CTD-TI-BR069b LD-CTD-TI-BR069c LD-CTD-TI-BR076a LD-CTD-TI-BR076b LD-CTD-TI-BR077a LD-CTD-TI-BR077b LD-CTD-TI-BR078a LD-CTD-TI-BR078b LD-CTD-TI-BR079a LD-CTD-TI-BR079b LD-CTD-TI-BR081
							TI-19 BRs Continued… LD-CTD-TI-BR083a LD-CTD-TI-BR083b LD-CTD-TI-BR090 LD-CTD-TI-BR091 LD-CTD-TI-BR092 LD-CTD-TI-BR093 LD-CTD-TI-IB008 LD-FE-CA-BR161 LD-FE-GL-BR125 LD-FE-GL-BR126 LD-FE-GL-BR127 LD-FE-GL-BR128 LD-FE-GL-BR129 LD-FE-GL-BR130 LD-FE-GL-BR131 LD-FE-GL-BR132 LD-CERT-TG-BR062a LD-CERT-TG-BR062b LD-CERT-TG-BR062c LD-CERT-TG-BR225 LD-CERT-TG-BR236 LD-CERT-TG-BR240 LD-CERT-TG-BR241 LD-CERT-TG-BR242 LD-CERT-TG-BR243 LD-CERT-TG-BR244 LD-CERT-TG-BR245

	Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-TI-BR084a LD-CTD-TI-BR084b
MPG = miles per gallon MPK = miles per kilogram KW-HR/100MILES = kilowatt-hour per mile	Light-Duty	Certification Test Data	FE Units might be changing with the new FE Label rule	Mfr	Front End	XML	LD-CTD-TI-BR038 LD-CTD-TI-BR039 LD-CTD-TI-IB002
	Light-Duty	Certification Test Data		Verify	Back End	Assigned	
	Light Duty	Certification Test Data	Must use ASTM rounding methodology. Don't round Integrated Amp-hours, System Start State of Charge Watt-hours, System End State of Charge Watt-hours	Verify	Back End	Assigned	
	Light Duty	Certification Test Data		Verify	Back End	Assigned	

			Verify Light-Duty Data Requirements				
Light Duty	Certification Test Data			Verify	Back End	Assigned	
Light Duty	Certification Test Data			Verify	Back End	Assigned	
Light Duty	Certification Test Data			Verify	Back End	Assigned	LD-CERT-TG-BR189 LD-FE-CA-BR175 LD-FE-CA-BR209
Light Duty	Certification Test Data	Verify BE Rule: NEW: If Test 5-Cycle Category (TI-45) is 'FTP75' or 'HWY' and if Test Result/Emission Name (TI-19) values of 'HC-NM' (Non-methane Hydrocarbon), 'METHANE' (CH4 - Methane) and 'N2O' (Nitrous Oxide) are submitted, then Unrounded Unadjusted OPT-CREE (TI-19.5) is required.		Verify	Back End	Assigned	LD-CTD-TI-BR070
Light Duty	Certification Test Data			Verify	Back End	Assigned	
Light Duty	Certification Test Data			Verify	Back End	Assigned	
Light Duty	Certification Test Data			Verify	Back End	Assigned	LD-CERT-TG-BR189 LD-FE-CA-BR160
Light Duty	Certification Test Data	Verify BE Rule: NEW: If Test Category (TI-43) = 'CD' (Charge Depleting), then Certification Level (TI-39) is not to be calculated.		Verify	Back End	Assigned	LD-CTD-TI-BE001

Pass = Cert Level <= Standard Fail = Cert Level > Standard	Light Duty	Certification Test Data	Verify BE Rule: NEW: If Test Procedure (TI-8) is equal to "Charge Depleting UDDS" (Test Procedure Code = '81'), "Charge Depleting Highway" (Test Procedure Code = '84'), or "Charge Depleting US06" (Test Procedure Code = '83'), then Certification Disposition Code (TI-40) is not allowed (i.e. not calculated). Verify BE Rule: NEW: If Test Result/Emission Name (TI-19) is equal to "CREE" or "OPT-CREE", then Certification Disposition Code (TI-40) are not allowed (i.e. not calculated). Verify will compare the Calculated Cert Level with the corresponding standard and will set the Certification Disposition Code to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail".	Verify	Back End	Assigned	LD-CTD-TI-BE002 LD-CTD-TI-BE003
	Light Duty	Certification Test Data	Must use ASTM rounding methodology.	Verify	Back End	Assigned	
	Light Duty	Certification Test Data		Verify	Back End	Assigned	
Pass = Cert Level <= Standard Fail = Cert Level > Standard	Light-Duty	Certification Test Data	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Pass/Fail Indicator to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail". This is only calculated for LOD confirmatory tests- not for tests submitted by the mfr. The pass/fail calculation for mfr tests happens on the CSI in the Certification data requirements. (delete this element from the schema since it is a Verify back-end calculation)	Verify	Back end	Assigned	

Verify Light-Duty Data Requirements

FTP = Federal Test Procedure US06 = US06 SC03 = SC03 HWY = Highway NOx EVAP = Evaporative SPIT = Spitback ORVR = On-board Refueling Vapor Recovery NCNHE = Non-City, Non-Highway Exhaust URBRNG = Urban Range HWYRNG = Highway Range AC-IDLE = A/C Idle Test CD = Charge Depleting EVAP-COMP = Evaporative - Component EVAP-LEAK = Evaporative - Leak		Light Duty	Certification Test Data	EVAP = 23, 27, 34, 38, 43, 47 FTP = 2, 11, 21, 25, 31, 35, 41, 45, 51, 52 HWY = 3 HWYRNG = 63 NCNHE = 9, 10, 72, 76 ORVR = 24, 32, 37, 44 SC03 = 95 SPIT = 15 URBRNG = 62 US06 = 16, 90, 96 A/C Idle = 60, 61, 87, 88 Charge Depleting = 81, 83, 84, 85, 86 EVAP-COMP = 64, 65 EVAP-LEAK = 66, 67, 68, 69	Verify	Back End	Assigned	LD-FE-GL-BR037 LD-CTD-TI-BR082
EL = Electricity CNG = Natural Gas D = Diesel E = Ethanol G = Gasoline H = Hydrogen LPG = LPG M = Methanol		Light Duty	Certification Test Data	EL= 62 CNG = 10, 41 D = 9, 19, 30 E = 36, 37, 38, 43, 44, 45, 71 G = 1, 6, 7, 8, 22, 23, 24, 25, 26, 27, 46, 61, 28, 29, 48, 49, 58, 59 H = 50 LPG = 42 M = 31, 32, 33, 34	Verify	Backend	Assigned	
FTP75 = Federal Test Procedure (75 °F) FTP20 = Federal Test Procedure (20 °F) US06 = US06 SC03 = SC03 HWY = Highway Nox NOT5C = Not 5-Cycle		Light Duty	Certification Test Data	This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories. FTP75 = 2, 21, 25, 31, 35, 41, 45 FTP20 = 11 HWY = 3 SC03 = 95 US06 = 90 All test procedures that don't get mapped to one of the 5 cycle categories would be set to "NOT5C".	Verify	Back End	Assigned	LD-FE-CA-BR012 LD-FE-CA-BR166 LD-FE-CA-BR167 LD-CERT-TG-BR220

EPA Data Element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value
Tier 3 Update (Release 15.0)															
Manufacturer Confirmatory Test Decision Information															
	Vehicle Information		manufacturerConfirmatoryTestDescisionInfo												
DI-0.5	**Process Code**	Select the desired process code for the current submission.	DecisionInformationSubmission/DecisionInformationDetails	InformationProcessCode	1	1 per Conf Test Decision Information	A(1)	Enumeration	1	1					
DI-1	**Manufacturer code**	The manufacturer code will be determined from the data submitter's CDX user login profile. The manufacturer code is an alpha-numeric code which identifies a unique vehicle manufacturer. This code is assigned by EPA during the manufacturer registration process.	DecisionInformationSubmission/DecisionInformationDetails	EPAManufacturerCode	1	1 per Conf Test Decision Information	A(3)	String	3	3	[A-Z0-9]{3}				
DI-2	**Manufacturer Name**	The manufacturer name will be looked up from the Manufacturer Info table in Verify using the manufacturer code from the data submitter's CDX user login profile. The manufacturer name is the name of the vehicle manufacturer that is associated with the manufacturer code.	N/A	N/A	0	1 per Conf Test Decision Information	A(40)	String	1	40					
DI-3	**Vehicle ID**	Enter the applicable test vehicle identification number for this set of confirmatory test decision information. The vehicle ID is a unique, manufacturer-defined, alpha-numeric identification number that is assigned to each manufacturer test vehicle. The combination of test vehicle ID and vehicle configuration number entered here must be established in Verify's Test Vehicle Information database prior to submitting its confirmatory test decision information.	DecisionInformationSubmission/DecisionInformationDetails	VehicleIdentificationText	1	1 per Conf Test Decision Information	A(20)	String	1	20					
DI-4	**Vehicle Configuration #**	Enter the applicable test vehicle configuration number for this set of confirmatory test decision information. The vehicle configuration number is used to denote multiple configurations of a single test vehicle ID. The combination of test vehicle ID and vehicle configuration number entered here must be established in Verify's Test Vehicle Information database prior to submitting confirmatory test decision information.	DecisionInformationSubmission/DecisionInformationDetails	VehicleConfigurationNumber	1	1 per Conf Test Decision Information	N(2)	Integer	1	2				0	99
DI-5	**Model Year**	Enter the base model year for which the vehicle is being tested.	DecisionInformationSubmission/DecisionInformationDetails	ModelYear	1	1 per Conf Test Decision Information	D(4)	Date	4	4	yyyy			1970	2050

DI-5.5	**Represented test vehicle make**	The represented test vehicle make (aka division name) for this test vehicle configuration.	N/A	ActualTestVehicleMakeText	1	1 per Conf Test Decision Information	A(20)	String	1	20				
DI-5.6	**Represented test vehicle model**	The represented test vehicle model (aka carline name) for this test vehicle configuration.	N/A	ActualTestVehicleModelText	1	1 per Conf Test Decision Information	A(50)	String	1	50				
DI-6	**Actual Vehicle Model Name (Carline)**	Enter the **actual** carline/model name represented by this test vehicle.	DecisionInformationSubmission/DecisionInformationDetails	VehicleModelText	1	1 per Conf Test Decision Information	A(50)	String	1	50				
DI-7	**Test Group**	Enter the test group for which this set of confirmatory test decision information will be used to demonstrate compliance with the applicable exhaust emission standards.	DecisionInformationSubmission/DecisionInformationDetails	TestGroupName	1	1 per Conf Test Decision Information	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}([\\.][A-Z0-9]{1,6})?			
DI-8	**Evaporative/Refueling Family**	Enter the evaporative/refueling family for which this set of confirmatory test decision information will be used to demonstrate compliance with the applicable evaporative/refueling standards.	DecisionInformationSubmission/DecisionInformationDetails	EvaporativeRefuelingFamilyName	0	1 per Conf Test Decision Information	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4}[0-9]{4}[A-Z0-9]{3}			
DI-9	**Federal Exhaust Emission Standard Level**	Select the applicable value representing EPA's exhaust emission standard level.	DecisionInformationSubmission/DecisionInformationDetails	FederalExhaustEmissionStandardIdentifier	0	1 per Conf Test Decision Information	A(4)	Enumeration						

DI-9	**Federal Exhaust Emission Standard Level (continued)**									DI-9							
DI-10	**California Exhaust Emission Standard Level**	Select the applicable value representing California's exhaust emission standard level.	DecisionInformationSubmission/DecisionInformationDetails	CAexhaustEmissionStandardIdentifier	0	1 per Conf Test Decision Information	A(4)	Enumeration									
DI-11	**Federal Evaporative Emission Standard Level**	Select the applicable value representing EPA's evaporative emission standard level.	DecisionInformationSubmission/DecisionInformationDetails	FederalEvaporativeEmissionStandardsIdentifier	0	1 per Conf Test Decision Information	A(5)	Enumeration									

		Description											
DI-12	**California Evaporative Emission Standard Level**	Select the applicable value representing California's evaporative emission standard level.	DecisionInformationSubmission/DecisionInformationDetails	CAEvaporativeEmissionStandardsIdentifier	0	1 per Conf Test Decision Information	A(2)	Enumeration				
DI-13	**Preview meeting test decision**	Did EPA request a confirmatory test for this vehicle during the preview meeting? Answer 'Y' if yes, otherwise 'N'.	DecisionInformationSubmission/DecisionInformationDetails	PreviewTestDecisionIndicator	1	1 per Conf Test Decision Information	A(1)	Enumeration				
DI-14	**New engine/new technology**	Does this test vehicle use a new engine or new technology? Answer 'Y' if yes, 'YT' if yes, but the new engine/technology has already been tested by EPA, otherwise 'N'.	DecisionInformationSubmission/DecisionInformationDetails	NewTechnologyIndicator	1	1 per Conf Test Decision Information	A(2)	Enumeration				
DI-15	**New engine/new technology description**	Enter a description of the new engine or new technology.	DecisionInformationSubmission/DecisionInformationDetails	NewTechnologyDescriptionText	0	1 per Conf Test Decision Information	A(100)	String	1	100		
DI-16	**Replacement for failed vehicle**	Is this test vehicle a replacement for a vehicle which has previously failed an emission standard at EPA or the manufacturer's test facility? Answer 'Y' if yes or 'N' if no.	DecisionInformationSubmission/DecisionInformationDetails	FailedVehicleReplacementIndicator	1	1 per Conf Test Decision Information	A(1)	Enumeration				
DI-25	**Potential gas guzzler?**	Does this test meet the criteria for a potential gas guzzler as defined in the CFR? Answer 'Y' if yes or 'N' if no. This question must be answered for each fuel economy test procedure conducted by the manufacturer.	DecisionInformationSubmission/DecisionInformationDetails	PotentialGasGuzzlerIndicator	1	1 per Conf Test Decision Information	A(1)	Enumeration				
DI-25.1	**Vehicle Purpose**	Is this test vehicle configuration an Emission Data Vehicle or a Fuel Economy Data Vehicle?	DecisionInformationSubmission/DecisionInformationDetails	VehiclePurposeIdentifier	1	1 per Conf Test Decision Information	A(4)	Enumeration				
DI-25.15	**High Selling Vehicle for FE Labeling Purposes?**	Is data from this set of confirmatory test decision information the highest selling subconfiguration within the highest selling configuration for a base level?	DecisionInformationSubmission/DecisionInformationDetails	HighSellingVehicleForFuelEconomyLabelingPurposesIndicator	1	1 per Conf Test Decision Information	A(2)	Enumeration				
DI-25.2	**Running Change?**	Does this set of Confirmatory Test Decision Information support a running change?	DecisionInformationSubmission/DecisionInformationDetails	RunningChangeIndicator	1	1 per Conf Test Decision Information	A(1)	Enumeration				
DI-25.3	**Running Change Number**	If this set of Confirmatory Test Decision Information supports a running change, enter the running change number.	DecisionInformationSubmission/DecisionInformationDetails	RunningChangeNumberText	0	1 per Conf Test Decision Information	A(25)	String				
DI-25.4	**Running Change Date**	If this set of Confirmatory Test Decision Information supports a running change, enter the date of the running change letter.	DecisionInformationSubmission/DecisionInformationDetails	RunningChangeDate	0	1 per Conf Test Decision Information	D(8)	Date			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}	
DI-17	**Earliest Vehicle EPA arrival date**	Enter the earliest date the test vehicle could be delivered to EPA for confirmatory testing. EPA's Laboratory Operations Division will use this information when assigning a test date if this test vehicle is selected for EPA confirmatory testing.	DecisionInformationSubmission/DecisionInformationDetails	EarliestArrivalDate	1	1 per Conf Test Decision Information	D(8)	Date	8	8	[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}	
	Test Procedure Information		**manufacturerConfirmatoryTestDescisionInfo**			**1..n**						

DI-17.5	**Test Number**	Enter all applicable test numbers for this test group/evaporative family combination. This is a unique number assigned by Verify to identify this set of test info and results. Character 1 is the Model Year the test was originally run for, Characters 2 - 5 are the Manufacturer code followed by a dash, characters 6 -12 are the sequential 7-digit test number. For the sequential test number, if it begins with 9 its an EPA test, any other number is a manufacturer test. A sample test number is "9MFR-9012345".	DecisionInformationSubmission/DecisionInformationDetails/ TestProcedureInformationDetails	TestNumberIdentifier	1	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(12)	Fixed String	12	12				
DI-18	**Manufacturer test procedures used**	Enter all applicable test procedures that were conducted on this test vehicle by the manufacturer.		TestProcedureIdentifer	1	1 per test procedure/test fuel type combination per Conf Test Decision Information	N(2)	Enumeration						

		Description												
DI-19	**Test Fuel type code**	Enter the numeric fuel type code that specifies the fuel type used in manufacturer testing for this test procedure.		TestFuelTypeCode	1	1 per test procedure/test fuel type combination per Conf Test Decision Information	N(2)	Enumeration						
DI-20	**Test Fuel type description**	This is a system generated field based on the value entered for the "Test Fuel Type Code".	n/a	n/a	0	1 per Test Fuel Type Code per Test Procedure/Test Fuel Type Combination per Conf Test Decision Information	A(40)	String	1	40				
DI-21	**Mfr. confirmatory test required for mfr. test procedure?**	Does this set of confirmatory test decision information meet the criteria in the CFR that defines when a manufacturer confirmatory test is required? Answer 'Y' for "yes" or 'N' for "no". This question must be answered for each test procedure conducted by the manufacturer.	DecisionInformationSubmission/DecisionInformationDetails/ TestProcedureInformationDetails	ManufacturerTestRequiredIndicator	1	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(1)	Enumeration	1	1				
DI-22	**Failed an emission test?**	Did this test vehicle previously fail an emission test as defined in the CFR? Answer 'Y' if yes or 'N' if no. This question must be answered for each test procedure conducted by the manufacturer.	DecisionInformationSubmission/DecisionInformationDetails/ TestProcedureInformationDetails	TestFailedIndicator	1	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(1)	Enumeration						
DI-23	**Emissions > 90% of standard?**	Are any of the emission results for this test within 90% of the applicable emission standards as defined in the CFR for manufacturer conducted testing? Answer 'Y' if yes or 'N' if no. This question must be answered for each test procedure conducted by the manufacturer.	DecisionInformationSubmission/DecisionInformationDetails/ TestProcedureInformationDetails	Within90PercentOfStandardIndicator	1	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(1)	Enumeration						
DI-24	**Higher than expected fuel economy?**	Does this test have higher than expected fuel economy as defined in the CFR for manufacturer conducted testing? Answer 'Y' if yes or 'N' if no. This question must be answered for each fuel economy test procedure conducted by the manufacturer.	DecisionInformationSubmission/DecisionInformationDetails/ TestProcedureInformationDetails	HigherThanExpectedFuelEconomyIndicator	1	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(1)	Enumeration						

DI-26	**Fuel economy > Class leader?**	Does this test meet the criteria for fuel economy class leader as defined in the CFR for manufacturer conducted testing? Answer 'Y' if yes or 'N' if no. This question must be answered for each fuel economy test procedure conducted by the manufacturer.	DecisionInformationSubmission/DecisionInformationDetails/ TestProcedureInformationDetails	FuelEconomyGreaterThanLeaderIndicator	1	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(1)	Enumeration							
	Manufacturer Submission Information		**manufacturerConfirmatoryTestDescisionInfo**												
DI-28	**Manufacturer comments**	Enter any comments to describe the changes being made if this is an update to a previously submitted set of confirmatory test decision information for which EPA has already made its confirmatory testing decision.	DecisionInformationSubmission/DecisionInformationDetails	SubmissionCommentText	0	1 per Conf Test Decision Information	A(500)	String	1	500					
DI-29		A system-generated field indicating the date that this set of confirmatory test decision information is submitted to EPA.			1	1 per Conf Test Decision Information	D(8)	Date							
DI-30	**Manufacturer Confirmatory Test Contact Name**	The name of the manufacturer representative that should be contacted if EPA has questions regarding this set of confirmatory test decision information. The contact's email address and phone number will be looked up from the contact information previously entered by the manufacturer in the Manufacturer Information module of Verify.	N/A	ContactRepresentativeName	1	1 per Conf Test Decision Information	A(50)	String		50					
DI-31	**Mfr Confirmatory Test Contact email address**	E-mail address of the manufacturer representative that should be contacted if EPA has questions regarding this set of confirmatory test decision information. The contact's email address will be looked up from the contact information previously entered by the manufacturer in the Manufacturer Information module of Verify.	N/A	ContactEmailText	1	1 per Conf Test Decision Information	A(100)	String		100					
DI-32	**Manufacturer Confirmatory Test Contact Phone Number**	Phone number of the manufacturer representative that should be contacted if EPA has questions regarding this set of confirmatory test decision information. The contact's phone number will be looked up from the contact information previously entered by the manufacturer in the Manufacturer Information module of Verify.	N/A	ContactPhoneNumberText	1	1 per Conf Test Decision Information	A(25)	String		25					
	CISD Test Decision Information														
DI-33	**Random test selection rate**	Internal EPA field only. Adjustable % rate used for random test selection algorithm. Determined by EPA.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails	RandomTestSelectionRate	1	1 per Conf Test Decision Information	N(2)	Integer						0	99
DI-34	**Random test selection indicator**	Internal EPA field only. Indicates if confirmatory test was a random selection. Y/N; default == null.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails	RandomTestSelectionIndicator	1	1 per Conf Test Decision Information	A(1)	Enumeration							
DI-35	**EPA Testing decision indicator**	Internal EPA field only. Indicates if confirmatory test will be conducted at EPA. Y/N; default == null.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails	EPATestDecisionIndicator	1	1 per Conf Test Decision Information	A(1)	Enumeration	1	1					

DI-36	**Reason for confirmatory EPA testing code**	Internal EPA field only. Multiple predefined codes used to lookup 'reason for conf. EPA test' descriptions.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails	EPAConfirmatoryTestReasonCode	1	1 per Conf Test Decision Information	N(2)	Enumeration	2	2				
DI-37	**Reason for confirmatory EPA testing code description**	Internal EPA field only. Possible values: '01' = random audit '06' = new engine/technology '99' = other reason		CISDTestDecisionInformation	1	1 per Conf Test Decision Information	A(40)	Enumeration	2	2				
DI-38	**Test procedure codes selected for EPA Confirmatory Testing**	Internal EPA field only. EPA defined codes which correspond to a set of unique test procedures used for confirmatory testing at EPA. Multiple predefined codes used to lookup test procedure descriptions.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/EPATestDetails	EPATestProcedureCode	1	1..n per Conf Test Decision Information	N(2)	Enumeration						
DI-38.5	**Test Fuel Type Code For EPA Confirmatory Testing**	Internal EPA field only. The test fuel that will be used for each of the test procedures selected by EPA for EPA confirmatory testing.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/EPATestDetails	EPATestFuelTypeCode	1	1..n per Conf Test Decision Information	N(2)	Enumeration						

ID	Name	Description	XPath	Element Name	Req	Cardinality	Format	Data Type	Min	Max
DI-38.8	**EPA Road Speed Fan Usage Indicator**	Should a road speed fan be used for this selected test?	N/A	N/A	1	1 per Test Procedure/Fuel Type combination per Conf Test Decision Information	A(1)	Enumeration		
DI-39	**Special testing instructions**	Internal EPA field only. CCD analyst defined.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails	SpecialTestInstructionText	0	1 per Conf Test Decision Information	A(1000)	String	1	1000
DI-40	**Number of preps**	Internal EPA field only. Number of LA-4 prep cycles for a test vehicle. Entered by cert analyst.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails	PrepCyclesNumber	1	1 per Conf Test Decision Information	N(2)	Integer	1	2
DI-41	**Cert analyst name**	Internal EPA field only. CCD analyst who made test decision.			1	1 per Conf Test Decision Information	A(30)	String	1	30
DI-42	**Cert analyst phone #**	Internal EPA field only. CCD analyst phone number.			1	1 per Conf Test Decision Information	A(15)	String	15	15
DI-43	**Cert conf. test decision date and time**	Internal EPA field only. Date and time of CCD analyst's decision. Format: yyyy/mm/dd hh:nn (24hr)			1	1 per Conf Test Decision Information	D(12)	Date	12	12
DI-44	**Cert comments**	Internal EPA field only. CCD analyst defined.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails	CertificationCommentText	0	1 per Conf Test Decision Information	A(1000)	String	1	1000
DI-45	**Manufacturer report suppression indicator**	Internal EPA field only. Possible Values: Y = A copy of the confirmatory test report is not sent electronically to the manufacturer. N = Report is automatically sent following the EPA confirmatory test.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails	ManufacturerReportSuppressionIndicator	0	1 per Conf Test Decision Information	A(1)	Enumeration	1	1
	LOD Test Scheduling Information									
DI-46	**LOD assigned test date**	Internal EPA field only. Test date assigned by LOD.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ LODTestScheduleDetails	AssignedTestDate	1	1 per Conf Test Decision Information	D(8)	Date	8	8
DI-47	**LOD test date assigner**	Internal EPA field only. LOD representative who assigned test date.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ LODTestScheduleDetails	TestDateAssignerName	1	1 per Conf Test Decision Information	A(50)	String	1	50
DI-48	**LOD test date assigner 2**	Internal EPA field only. LOD representative who assigned test date if different than logged in user.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ LODTestScheduleDetails	TestDateAlternateAssignerName	1	1 per Conf Test Decision Information	A(50)	String	1	50
DI-49	**LOD date of test date assignment**	Internal EPA field only. Date of test assignment.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ LODTestScheduleDetails	TestDateAssignmentDate	1	1 per Conf Test Decision Information	D(8)	Date	8	8
DI-50	**LOD comments**	Internal EPA field only. LOD representative defined.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ LODTestScheduleDetails	LODCommentText	0	1 per Conf Test Decision Information	A(200)	String	1	200
	Retest Information									
DI-51	**Retest needed?**	Internal EPA field only. Y/N; default == null. Entered by Cert analyst. Y = Need to conduct a retest. N = No need to retest. Decision is made by CISD, LOD, and manufacturer, or a combination of the three.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ RetestInformationDetails	RetestIndicator	1	1 per Conf Test Decision Information	A(1)	Enumeration	1	1
DI-52	**Retest decision comment**	Internal EPA field only. Comment entered by LOD or CISD representative.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ RetestInformationDetails	RetestDecisionCommentText	0	1 per Conf Test Decision Information	A(500)	String	1	500
DI-53	**Cert Analyst (retest)**	Internal EPA field only. Cert analyst deciding retest status.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ RetestInformationDetails	RetestCertificationAnalystName	1	1 per Conf Test Decision Information	A(50)	String	1	50

DI-54	**Cert retest decision date**	Internal EPA field only. Date of Cert analyst's retest decision.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ RetestInformationDetails	RetestCertificationDecisionDate	1	1 per Conf Test Decision Information	D(8)	Date	8	8				
DI-55	**LOD retest date**	Internal EPA field only. Date of retest assigned by LOD.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ RetestInformationDetails	RetestDate	1	1 per Conf Test Decision Information	D(8)	Date	8	8				
DI-56	**LOD retest date assigner**	Internal EPA field only. LOD representative who assigned retest date.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ RetestInformationDetails	RetestDateAssignerName	1	1 per Conf Test Decision Information	A(50)	String	1	50				
DI-57	**LOD retest date assigned**	Internal EPA field only. Date of retest date assignment.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ RetestInformationDetails	RetestDateAssignmentDate	1	1 per Conf Test Decision Information	D(8)	Date	8	8				
DI-58	**Reason for retest code**	Internal EPA field only. Multiple predefined codes to lookup retest descriptions. 1=void; 2=emission failure; 3=high coast down; 4=FE different by > 3%	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ RetestInformationDetails	RetestReasonIdentifier	1	1 per Conf Test Decision Information	A(1)	Enumeration	1	1				
DI-59	**Testing complete indicator**	Internal EPA field only. EPA sets to 'Y' when vehicle is finished with testing	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ RetestInformationDetails	TestCompletionIndicator	1	1 per Conf Test Decision Information	A(1)	Enumeration	1	1				
	LOD QC Check Information													
DI-60	**QC check indicator**	Internal EPA field only. 'Y' or 'N' (default). Y = LOD quality control (QC) check of test has been performed. N = No check has been performed. LOD QC indicator is used for a "basic" check at the time the LOD test is finished, and a second time during a final LOD QC check of the confirmatory test results.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ LODQualityControlCheckDetails	BasicCheckIndicator	0	1 per Conf Test Decision Information	A(1)	Enumeration	1	1				
DI-61	**QC check assigner**	Internal EPA field only. LOD represetative who did the QC check.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ LODQualityControlCheckDetails	CheckAssignerName	0	1 per Conf Test Decision Information	A(50)	String	1	50				
DI-62	**QC check comments**	Internal EPA field only. LOD representative defined.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ LODQualityControlCheckDetails	CheckCommentText	0	1 per Conf Test Decision Information	A(200)	String	1	200				
DI-63	**QC check entry date**	Internal EPA field only. Date the final LOD QC check was completed.	DecisionInformationSubmission/DecisionInformationDetails/ EPAGeneratedDecisionInformationDetails/ LODQualityControlCheckDetails	CheckEntryDate	1	1 per Conf Test Decision Information	D(8)	Date	8	8				

Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
	Light Duty						
Look-up Values N = New dataset C = Correction of existing Verify dataset	Light-Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test		CDX From Users Info	Front End	XML	LD-CFT-DI-BR001 LD-CFT-DI-BR004 LD-CFT-DI-BR005 LD-CFT-DI-BR010a LD-CFT-DI-BR010b LD-CFT-DI-BR011 LD-CFT-DI-BR016 LD-CFT-DI-BR017 LD-CFT-DI-BR019
	Light Duty	Confirmatory Test		Verify	Back End	Pre-Existing Data	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR010a LD-CFT-DI-BR010b LD-CFT-DI-BR011 LD-CFT-DI-BR019
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR010a LD-CFT-DI-BR010b LD-CFT-DI-BR011 LD-CFT-DI-BR019
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR002 LD-CFT-DI-BR003 LD-CFT-DI-BR010a LD-CFT-DI-BR010b LD-CFT-DI-BR019

	Light-Duty	Confirmatory Test	VI-8 This change must be made on Verify front end and back end web screens but no changes are needed to the XML Schema	Verify	Back End	Pre-Existing Data	n/a
	Light-Duty	Confirmatory Test	VI-9 This change must be made on Verify front end and back end web screens but no changes are needed to the XML Schema	Verify	Back End	Pre-Existing Data	n/a
	Light Duty	Confirmatory Test	This change must be made on Verify front end and back end web screens but no changes are needed to the XML Schema	Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR002 LD-CFT-DI-BR004 LD-CFT-DI-BR006
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR003 LD-CFT-DI-BR005 LD-CFT-DI-BR008
Look-up Values B1 = Federal Tier 2 Bin 1 B2 = Federal Tier 2 Bin 2 B3 = Federal Tier 2 Bin 3 B4 = Federal Tier 2 Bin 4 B5 = Federal Tier 2 Bin 5 B6 = Federal Tier 2 Bin 6 B7 = Federal Tier 2 Bin 7 B8 = Federal Tier 2 Bin 8 B9 = Federal Tier 2 Bin 9 B10 = Federal Tier 2 Bin 10 B11 = Federal Tier 2 Bin 11 HDV1 = HDV1 (Federal HD chassis Class 2b GVW 8501-10000) HDV2 = HDV2 (Federal HD chassis Class 3 GVW 10001-14000) OT = Other T1 = Federal Tier 1 (for use by ICIs only)	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR012

T3B160 - Federal Tier 3 Bin 160 T3B125 - Federal Tier 3 Bin 125 T3B110 - Federal Tier 3 Transitional Bin 110 T3B85 - Federal Tier 3 Transitional Bin 85 T3SULEV30 – Federal Tier 3 Transitional LEV-II SULEV30 Carryover T3B70 - Federal Tier 3 Bin 70 T3B50 - Federal Tier 3 Bin 50 T3B30 - Federal Tier 3 Bin 30 T3B20 - Federal Tier 3 Bin 20 T3B0 - Federal Tier 3 Bin 0 HDV2B395 - Federal Tier 3 HD Class 2b Transitional Bin 395 HDV2B340 - Federal Tier 3 HD Class 2b Transitional Bin 340 HDV2B250 - Federal Tier 3 HD Class 2b Bin 250 HDV2B170 - Federal Tier 3 HD Class 2b Bin 170 HDV2B150 - Federal Tier 3 HD Class 2b Bin 150 HDV2B0 - Federal Tier 3 HD Class 2b Bin 0 HDV3B630 - Federal Tier 3 HD Class 3 Transitional Bin 630 HDV3B570 - Federal Tier 3 HD Class 3 Transitional Bin 570 HDV3B400 - Federal Tier 3 HD Class 3 Bin 400 HDV3B270 - Federal Tier 3 HD Class 3 Bin 270 HDV3B230 - Federal Tier 3 HD Class 3 Bin 230 HDV3B200 - Federal Tier 3 HD Class 3 Bin 200 HDV3B0 - Federal Tier 3 HD Class 3 Bin 0	Quality		NEW Business Rule : 'T3B110', 'T3B85' and 'T3SULEV30' are not allowed for Model Year (DI-5) 2020 and later. NEW Business Rule : 'HDV2B395', 'HDV2B340', 'HDV3B630' and 'HDV3B570' are not allowed for Model Year (DI-5) 2022 and later.				LD-CFT-DI-BR023 LD-CFT-DI-BR024
Look-Up Values B1 = Federal Tier 2 Bin 1 B2 = Federal Tier 2 Bin 2 B3 = Federal Tier 2 Bin 3 B4 = Federal Tier 2 Bin 4 B5 = Federal Tier 2 Bin 5 B6 = Federal Tier 2 Bin 6 B7 = Federal Tier 2 Bin 7 B8 = Federal Tier 2 Bin 8 L2 = California LEV-II LEV L2OP = California LEV-II LEV Optional U2 = California LEV-II ULEV S2 = California LEV-II SULEV ZEV = California ZEV PZEV = California PZEV L2LEV160 - California LEV-II LEV160 L2ULEV125 - California LEV-II ULEV125 L2SULEV30 - California LEV-II SULEV30 L2LEV395 - California LEV-II LEV395 L2ULEV340 - California LEVII ULEV340 L2LEV630 - California LEV-II LEV630 L2ULEV570 - California LEV-II ULEV570 L3LEV160 - California LEV-III LEV160 L3ULEV125 - California LEV-III ULEV125 L3ULEV70 - California LEV-III ULEV70 L3ULEV50 - California LEV-III ULEV50 L3SULEV30 - California LEV-III SULEV30 L3SULEV20 - California LEV-III SULEV20 L3LEV395 - California LEV-III LEV395 L3ULEV340 - California LEV-III ULEV340 L3ULEV250 - California LEV-III ULEV250 L3ULEV200 - California LEV-III ULEV200 L3SULEV170 - California LEV-III SULEV170 L3SULEV150 - California LEV-III SULEV150 L3LEV630 - California LEV-III LEV630 L3ULEV570 - California LEV-III ULEV570 L3ULEV400 - California LEV-III ULEV400 L3ULEV270 - California LEV-III ULEV270 L3SULEV230 - California LEV-III SULEV230 L3SULEV200 - California LEV-III SULEV200 OT = Other T1 = Federal Tier 1 (for use by ICIs only)	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR012
Look-Up Values T1 = Federal tier 1 enhanced (2 day + 3day) evap T2 = Federal tier 2 evap T3 - Federal tier 3 evap T3-3Z - Federal tier 3 LEV-III zero evap (Option 1) carryover HD-2D = Heavy-duty 2-day evap (1.75 grams) HD-3D = Heavy-duty 3-day evap (1.4 grams) OT = Other	Light Duty	Confirmatory Test	NEW Business Rule : 'T3-3Z' is not allowed for Model Year (DI-5) 2022 and later.	Manufacturer	Front End	XML	LD-CFT-DI-BR025

Look-Up Values C2 = California LEV-II Evap ZZ = California LEV-II Zero Evap 3Z = California LEV-III Zero Evap (Option 1) 4Z = California LEV-III Zero Evap (Option 2) OT = Other	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
Look-Up Values: Y = Yes YT = Yes, but previously tested N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR013
Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
1 = Emission Data Vehicle (EDV) 31 = Fuel Economy Data Vehicle (FEDV)		Confirmatory Test		Manufacturer	Front End	XML	
Y = Yes N = No NA = Not applicable; Data will not be used for FE Labeling purposes				Manufacturer	Front End	XML	
Look-Up Values: Y = Yes N = No		Confirmatory Test		Manufacturer	Front End	XML	
		Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR014
		Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR014
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	

			Verify Light-Duty Data Requirements			
						LD-CFT-DI-BR015
						LD-CFT-DI-BR020
	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR021
2 = CVS 75 AND LATER (W/O CAN. LOAD) 3 = HWFE (HIGHWAY TEST) 9 = HWY80 (80 MPH HIGHWAY TEST) 10 = IDLE CO 11 = COLD CO 15 = SPITBACK TEST 16 = Hot 1435 LA92 21 = FED FUEL 2 DAY EXH (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (ORVR) (BUTANE) 25 = CA FUEL 2 DAY EXH (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EXH (BUTANE LOAD) 32 - FED FUEL RUNNING LOSS 34 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 35 = CA FUEL 3 DAY EXH (BUTANE LOAD) 37 = CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EXH(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (ORVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EXH (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEG(F) EXHAUST TEST 52 = FED FUEL 50 DEG(F) EXHAUST TEST 60 = AC17 - MANUAL A/C CONTROLS 61 = AC17 - AUTOMATIC A/C CONTROLS 64 = EVAP CARB FUEL ONLY (RIG) TEST 65 = EVAP CANISTER BLEED TEST 66 = LEAK TEST - EVAP FUEL SYSTEM OBD 67 = LEAK TEST - PORT NEAR CANISTER 68 = LEAK TEST - PORT NEAR FUEL PIPE 69 = LEAK TEST - EVAP GAS CAP 72 = CST TWO SPEED IDLE TEST 76 = CST PRECD 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 83 = Charge Depleting US06 84 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 20 Degree F FTP 87 = A/C Idle Test- Manual A/C 88 = A/C Idle Test- Automatic A/C 90 = US06 95 = SC03 96 = US06 Bag 2 Only	Light Duty	Confirmatory Test	This should be the same list as TI-8 in Test Information	Verify	Back End	Pre-existing Data	LD-CFT-DI-IB001

1 = INDOLENE 30 6 = EPA UNLEADED GASOLINE 7 = INDUSTRIAL UNLEADED 100 OCTANE 8 = NUMBER 1 FUEL OIL 9 = CERT DIESEL 300 PPM SULFUR 10 = NATURAL GAS 18 = CARB CERT DIESEL 7-15 PPM SULFUR 19 = FEDERAL CERT DIESEL 7-15 PPM SULFUR 22 = SPECIAL UNLEADED 91 RON 23 = CARB PHASE II GASOLINE 24 = COLD CO REGULAR (CERT) 25 = COLD CO PREMIUM (CERT) 26 = COLD CO REGULAR (TIER 2) 27 = COLD CO PREMIUM (TIER 2) 28 = COLD CO E10 REGULAR GASOLINE (TIER 3) 29 = COLD CO E10 PREMIUM GASOLINE (TIER 3) 30 = COLD CO DIESEL 7-15 PPM SULFUR 31 = METHANOL (CERT M10) 32 = METHANOL (CERT M50) 33 = METHANOL (CERT M85) 34 = METHANOL (CERT M100) 36 = E70 (70% ETHANOL 30% EPA UNLEADED GASOLINE) 37 = E10 (10% ETHANOL 90% EPA UNLEADED GASOLINE) 38 = E85 (85% ETHANOL 15% EPA UNLEADED GASOLINE) 41 = CNG 42 = LPG 43 = E10 (10% ETHANOL 90% CAL PHASE II GASOLINE) 44 = E85 (85% ETHANOL 15% CAL PHASE II GASOLINE) 45 = E70 (70% ETHANOL 30% CAL PHASE II GASOLINE) 46 = CARB LEV3 E10 REGULAR GASOLINE 47 = CARB LEV3 E10 PREMIUM GASOLINE 48 = TIER 3 E10 REGULAR GASOLINE (9 RVP @LOW ALT.) 49 = TIER 3 E10 PREMIUM GASOLINE (9 RVP @LOW ALT.) 50 = HYDROGEN 58 = TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR ONLY) 59 = TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR ONLY) 61 = TIER 2 CERT GASOLINE 62 = ELECTRICITY 71 = E100 (100% ETHANOL)	Light Duty	Confirmatory Test		Verify	Back End	Pre-existing Data	
	Light Duty	Confirmatory Test		Verify	Back End	Pre-Existing Data	
Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test	Need a view that lists the Vehicle IDs/Configurations that Manufacturer answered Yes for this question and that the manufacturer still hasn't submitted their confirmatory test results to Verify. Verify will check to see if any subsequent tests have been submitted for the same Vehicle ID/Configuration.	Manufacturer	Front End	XML	
Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
Look-Up Values: Y = Yes N = No NA = Not Applicable	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	

Look-Up Values: Y = Yes N = No NA = Not Applicable	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR018
	Light Duty	Confirmatory Test		Verify	Front End	XML	
	Light Duty	Confirmatory Test		Verify/ Manufacturer	Back End	Pre-Existing Data	
	Light Duty	Confirmatory Test		Verify/ Manufacturer	Back End	Pre-Existing Data	
	Light Duty	Confirmatory Test		Verify/ Manufacturer	Back End	Pre-Existing Data	
	Light Duty	Confirmatory Test					
	Light Duty	Confirmatory Test		EPA	Back End	Data Entry	
Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		Verify	Back End	Assigned	
Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		EPA	Back End	Data Entry	

			Verify Light-Duty Data Requirements				

"01" = "Random"
"06" = "New Engine/Technology"
"99" = "Other"

| | Light Duty | Confirmatory Test | | EPA | Back End | Data Entry | |

"01" = "Random"
"06" = "New Engine/Technology"
"99" = "Other"

| | Light Duty | Confirmatory Test | | Verify | Back End | Pre-Existing Data | |

2 = CVS 75 AND LATER (W/O CAN. LOAD)
3 = HWFE (HIGHWAY TEST)
9 = HWY80 (80 MPH HIGHWAY TEST)
10 = IDLE CO
11 = COLD CO
15 = SPITBACK TEST
16 = Hot 1435 LA92
21 = FED FUEL 2 DAY EXH (BUTANE LOAD)
23 = FED FUEL 2 DAY EVAP (BUTANE)
24 = FED FUEL REFUEL (ORVR) (BUTANE)
25 = CA FUEL 2 DAY EXH (BUTANE LOAD)
27 = CA FUEL 2 DAY EVAP (BUTANE LOAD)
31 = FED FUEL 3 DAY EXH (BUTANE LOAD)
32 - FED FUEL RUNNING LOSS
34 = FED FUEL 3 DAY EVAP(BUTANE LOAD)
35 = CA FUEL 3 DAY EXH (BUTANE LOAD)
37 = CA FUEL RUNNING LOSS
38 = CA FUEL 3 DAY EVAP (BUTANE LOAD)
41 = FED FUEL 2 DAY EXH(HEAT TO LOAD)
43 = FED FUEL 2DAY EVAP(HEAT TO LOAD)
44 = FED REFUEL (ORVR) (HEAT TO LOAD)
45 = CA FUEL 2 DAY EXH (HEAT TO LOAD)
47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD)
51 = CA FUEL 50 DEG(F) EXHAUST TEST
52 = FED FUEL 50 DEG(F) EXHAUST TEST
60 = AC17 - MANUAL A/C CONTROLS
61 = AC17 - AUTOMATIC A/C CONTROLS
64 = EVAP CARB FUEL ONLY (RIG) TEST
65 = EVAP CANISTER BLEED TEST
66 = LEAK TEST - EVAP FUEL SYSTEM OBD
67 = LEAK TEST - PORT NEAR CANISTER
68 = LEAK TEST - PORT NEAR FUEL PIPE
69 = LEAK TEST - EVAP GAS CAP
72 = CST TWO SPEED IDLE TEST
76 = CST PRECD 2 SPD IDLE (EPA ONLY)
81 = Charge Depleting UDDS
83 = Charge Depleting US06
84 = Charge Depleting Highway
85 = Charge Depleting SC03
86 = Charge Depleting 20 Degree F FTP
87 = A/C Idle Test- Manual A/C
88 = A/C Idle Test- Automatic A/C
90 = US06
95 = SC03
96 = US06 Bag 2 Only

| | Light Duty | Confirmatory Test | NOTE: This list of EPA test procedures (DI-38) is being made consistent with the comprehensive list used for test procedure (DI-18). The XML tags do not need to change. | EPA | Back End | Data Entry | |

1 = INDOLENE 30
6 = EPA UNLEADED GASOLINE
7 = INDUSTRIAL UNLEADED 100 OCTANE
8 = NUMBER 1 FUEL OIL
9 = CERT DIESEL 300 PPM SULFUR
10 = NATURAL GAS
18 = CARB CERT DIESEL 7-15 PPM SULFUR
19 = FEDERAL CERT DIESEL 7-15 PPM SULFUR
22 = SPECIAL UNLEADED 91 RON
23 = CARB PHASE II GASOLINE
24 = COLD CO REGULAR (CERT)
25 = COLD CO PREMIUM (CERT)
26 = COLD CO REGULAR (TIER 2)
27 = COLD CO PREMIUM (TIER 2)
28 = COLD CO E10 REGULAR GASOLINE (TIER 3)
29 = COLD CO E10 PREMIUM GASOLINE (TIER 3)
30 = COLD CO DIESEL 7-15 PPM SULFUR
31 = METHANOL (CERT M10)
32 = METHANOL (CERT M50)
33 = METHANOL (CERT M85)
34 = METHANOL (CERT M100)
36 = E70 (70% ETHANOL 30% EPA UNLEADED GASOLINE)
37 = E10 (10% ETHANOL 90% EPA UNLEADED GASOLINE)
38 = E85 (85% ETHANOL 15% EPA UNLEADED GASOLINE)
41 = CNG
42 = LPG
43 = E10 (10% ETHANOL 90% CAL PHASE II GASOLINE)
44 = E85 (85% ETHANOL 15% CAL PHASE II GASOLINE)
45 = E70 (70% ETHANOL 30% CAL PHASE II GASOLINE)
46 = CARB LEV3 E10 REGULAR GASOLINE
47 = CARB LEV3 E10 PREMIUM GASOLINE
48 = TIER 3 E10 REGULAR GASOLINE (9 RVP @LOW ALT.)
49 = TIER 3 E10 PREMIUM GASOLINE (9 RVP @LOW ALT.)
50 = HYDROGEN
58 = TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR ONLY)
59 = TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR ONLY)
61 = TIER 2 CERT GASOLINE
62 = ELECTRICITY
71 = E100 (100% ETHANOL)

| | | Confirmatory Test | NOTE: This list of EPA test fuel type (DI-38.5) is being made consistent with the comprehensive list used for test fuel type (DI-19). The XML tags do not need to change. | EPA | Back End | Data Entry | LD-CFT-DI-BR022 |

	Light Duty	Confirmatory Test	****Send this to the LOD STARDATA Test Request table which is triggered by SI submission.	EPA	Back End	Data Entry	
Y = Yes N = No	Light Duty	Confirmatory Test		EPA	Back End	Data Entry	
	Light Duty	Confirmatory Test		EPA	Back End	Data Entry	
	Light Duty	Confirmatory Test	Default value of "1" but EPA cert rep can change to a different value.	EPA	Back End	Pre-Existing Data or Data Entry	
	Light Duty	Confirmatory Test		Verify	Back End	Pre-Existing Data	
	Light Duty	Confirmatory Test		Verify	Back End	Pre-Existing Data	
YYYYMMDD HH:NN (24 hr)	Light Duty	Confirmatory Test		Verify	Back End	Pre-Existing Data	
	Light Duty	Confirmatory Test		EPA	Back End	Data Entry	
Possible Values: Y = A copy of the confirmatory test report is not sent electronically to the manufacturer. N = Report is automatically sent following the EPA confirmatory test.	Light Duty	Confirmatory Test		EPA	Back End	Data Entry	
	Light Duty	Confirmatory Test					
YYYYMMDD	Light Duty	Confirmatory Test		LOD	Back End	Data Entry	
	Light Duty	Confirmatory Test		Verify	Back End	Assigned	
	Light Duty	Confirmatory Test		LOD	Back End	Data Entry	
YYYYMMDD	Light Duty	Confirmatory Test		Verify	Back End	Assigned	
	Light Duty	Confirmatory Test		LOD	Back End	Data Entry	
	Light Duty	Confirmatory Test					
Y = Need to conduct a retest. N = No need to retest	Light Duty	Confirmatory Test		EPA	Back End	Data Entry	
	Light Duty	Confirmatory Test		EPA	Back End	Data Entry	
	Light Duty	Confirmatory Test		Verify	Back End	Assigned	

			Verify Light-Duty Data Requirements			
YYYYMMDD	Light Duty	Confirmatory Test		Verify	Back End	Assigned
YYYYMMDD	Light Duty	Confirmatory Test		LOD	Back End	Data Entry
	Light Duty	Confirmatory Test		Verify	Back End	Assigned
YYYYMMDD	Light Duty	Confirmatory Test		Verify	Back End	Assigned
1=void; 2=emission failure; 3=high coast down; 4=FE different by > 3%	Light Duty	Confirmatory Test		EPA	Back End	Data Entry
Y = Testing completed. N = Testing not completed	Light Duty	Confirmatory Test		EPA	Back End	Data Entry
	Light Duty	Confirmatory Test				
Y = LOD quality control (QC) check of test has been performed. N = No check has been performed.	Light Duty	Confirmatory Test		LOD	Back End	Data Entry
	Light Duty	Confirmatory Test		Verify	Back End	Assigned
	Light Duty	Confirmatory Test		Verify	Back End	Assigned
YYYYMMDD	Light Duty	Confirmatory Test		Verify	Back End	Assigned

Tier 3 Update (Release 15.0)

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions
Shift Schedule Information																			
SS-0.5	Process Code	Select the desired process code for the current submission.	ShiftScheduleSubmission/ ShiftScheduleInformationDetails	InformationProcessCode	1		A(1)	Enumeration	1	1						Look-up Values N = New dataset C = Correction of existing Verify dataset	Light-Duty	Confirmatory Test	
SS-1	Shift schedule ID	Identifier for the shift schedule to be performed for a test	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/	ShiftScheduleIdentifier	1		A(4)	String	1	4	[A-Z0-9] {1,4}						Light-Duty	Confirmatory Test	Primary key for shift schedules is: shift schedule ID (SS-1) + shift schedule database code (SS-2) + mfr code (SS-4)
SS-2	Shift schedule database code	Internal EPA code for the source of the shift schedule. Verify will automatically load this element with "A".		n/a	1		A(1)	Enumeration								'A' = Manufacturers (for cert/fe)	Light-Duty	Confirmatory Test	Primary key for shift schedules is: shift schedule ID (SS-1) + shift schedule database code (SS-2) + mfr code (SS-4)
SS-4	Manufacturer code	Manufacturer code will be assigned during login.	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/	EPAManufacturerCode	1		A(3)	String	3	3	[A-Z0-9] {3}						Light-Duty	Confirmatory Test	Primary key for shift schedules is: shift schedule ID (SS-1) + shift schedule database code (SS-2) + mfr code (SS-4)
SS-5	Shift schedule description	The text description of the shift schedule.	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/	ShiftScheduleDecriptionText	0		A(30)	String	1	30							Light-Duty	Confirmatory Test	
SS-7	LNS error severity code	NOTE: (For EPA use only)		n/a	0		N(1)	Integer						0	5	0 .. 5	Light-Duty	Confirmatory Test	
SS-8	Non-cruise declutch speed	Speed for a declutch operation	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/ NonCruiseShiftDetails	DeclutchSpeedValue	1		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-9	Non-cruise 1-2 gear SS	1-2 acceleration shift point speed	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/ NonCruiseShiftDetails	Gear1To2SpeedValue	1		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-10	Non-cruise 2-3 gear SS	2-3 acceleration shift point speed	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/ NonCruiseShiftDetails	Gear2To3SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-11	Non-cruise 3-4 gear SS	3-4 acceleration shift point speed	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/ NonCruiseShiftDetails	Gear3To4SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-12	Non-cruise 4-5 gear SS	4-5 acceleration shift point speed	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/ NonCruiseShiftDetails	Gear4To5SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	

ID	Name	Description	Path	Element			Format	Type								Range		Test	Notes
SS-13	Non-cruise 5-6 gear SS	5-6 acceleration shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/NonCruiseShiftDetails	Gear5To6SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-14	Non-cruise 6-7 gear SS	6-7 acceleration shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/NonCruiseShiftDetails	Gear6To7SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-15	Non-cruise 7-8 gear SS	7-8 acceleration shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/NonCruiseShiftDetails	Gear7To8SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-16	Cruise declutch speed	Cruise speed for a declutch operation	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	DeclutchSpeedValue	1		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-17	Cruise 1-2 gear SS	1-2 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear1To2SpeedValue	1		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-18	Cruise 2-3 gear SS	2-3 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear2To3SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-19	Cruise 3-4 gear SS	3-4 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear3To4SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-20	Cruise 4-5 gear SS	4-5 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear4To5SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-21	Cruise 5-6 gear SS	5-6 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear5To6SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-22	Cruise 6-7 gear SS	6-7 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear6To7SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-23	Cruise 7-8 gear SS	7-8 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear7To8SpeedValue	0		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test	
SS-56	Drive schedule name code	Code identifying a particlar drive cycle, e.g. the FTP drive cycle.	ShiftScheduleSubmission/ShiftScheduleInformationDetails	DriveScheduleNameCode	1		A(3)	Enumeration								002' - FTP (Cert); '003' - HWFE (Cert); '004' - US06 (Cert); '005' - SC03 (Cert); '006' - HWY80 '007' - LA92 '021' - LA4 (prep only); '022' - LA4; '023' - 505; '031' - HWFE (no warmup); '101' - SCC#1; '102' - SCC#2; '103' - BIH (Auto); '104' - BIH (Manual); '111' - 3BagHWFE; '112' - 3Bag505; '121' - LA4 (perturbed 1.5)	Light-Duty	Confirmatory Test	CSC: Because there are some records in Verify that already have used '021', '022', and '101' please only remove the codes from the XML schema and front-end drop-down menus. i.e. those values should remain in the database.
SS-57	Model year	NOTE: Initial entry only.	ShiftScheduleSubmission/ShiftScheduleInformationDetails	ModelYear	0		N(4)	Date				4		1970	2100	1970 .. 2100	Light-Duty	Confirmatory Test	Required for a new shift schedule submission.
SS-58	Comments	Enter additional information about the shift schedule.	ShiftScheduleSubmission/ShiftScheduleInformationDetails	ShiftScheduleCommentText	0		A(200)	String	1	200							Light-Duty	Confirmatory Test	

ID	Name	Description	XPath	Element	Min Occurs	Occurrence	Type	Format	Length	Decimals	Min	Max	Valid Values	Program	Phase
SS-59	**Shift point number**	System-assigned when initially creating a shift schedule. To modify a shift point, a shift time must exist for the shift schedule. To insert a new shift point, a new shift point is submitted but not the shift point number… the system will automatically adjust the shift point numbers to include the new shift point.	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/ ShiftPointDetails	ShiftPointNumber	0	1..n	N(3)	Integer	3		1	999		Light-Duty	Confirmatory Test
SS-60	**Shift time**	Time in seconds from beginning of test drive cycle.	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/ ShiftPointDetails	ShiftTimeMeasure	1	1..shiftPointNu mber	N(5,1)	Decimal	5	1	0	2500	0000.0 - 2500.0	Light-Duty	Confirmatory Test
SS-61	**Shift speed**	in miles per hour (MPH) only.	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/ ShiftPointDetails	ShiftSpeedMeasure	0	1..shiftPointNu mber	N(4,1)	Decimal	4	1	0	200	000.0 - 200.0	Light-Duty	Confirmatory Test
SS-62	**Shift action code**	Code describing a shift event such as a shift from 1-2	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/ ShiftPointDetails	ShiftActionCode	1	1..shiftPointNu mber	A(2)	Enumeration					00 - declutch; 10 - declutch; 20 - declutch; 30 - declutch; 40 - declutch; 50 - declutch; 60 - declutch; 70 - declutch; 80 - declutch; 12 - upshift 1 to 2; 14 - upshift 1 to 4; 23 - upshift 2 to 3; 34 - upshift 3 to 4; 45 - upshift 4 to 5; 56 - upshift 5 to 6; 67 - upshift 6 to 7; 78 - upshift 7 to 8; 87 - downshift 8 to 7; 76 - downshift 7 to 6; 65 - downshift 6 to 5; 54 - downshift 5 to 4; 43 -downshift 4 to 3; 32 - downshift 3 to 2; 21 - downshift 2 to 1; 86 - down-skipshift 8 to 6; 85 - down-skipshift 8 to 5; 84 - down-skipshift 8 to 4; 83 - down-skipshift 8 to 3; 82 - down-skipshift 8 to 2; 81 - down-skipshift 8 to 1; 75 - down-skipshift 7 to 5; 74 - down-skipshift 7 to 4; 73 - down-skipshift 7 to 3; 72 - down-skipshift 7 to 2; 71 - down-skipshift 7 to 1; 64 - down-skipshift 6 to 4; 63 - down-skipshift 6 to 3; 62 - down-skipshift 6 to 2; 61 - down-skipshift 6 to 1; 53 - down-skipshift 5 to 3; 52 - down-skipshift 5 to 2; 51 - down-skipshift 5 to 1; 42 - down-skipshift 4 to 2; 41 - down-skipshift 4 to 1; 31 - down-skipshift 3 to 1; 97 - use shift indicator light; 98 - creeper gear; 99 - alternative shift action; ** - delete shift point	Light-Duty	Confirmatory Test

SS-63	**Alternative Shift Action Description**	Enter only if 'shift action code' = 99	ShiftScheduleSubmission/ ShiftScheduleInformationDetails/ ShiftPointDetails	ShiftPointScreenText	1..shiftPointNu mber	A(9)	String	0	9								Light-Duty	Confirmatory Test	
SS-64	**Shift point H/V indicator**	for EPA use only.		n/a	0	A(1)	Enumeration								'H' or 'V'		Light-Duty	Confirmatory Test	
SS-65	**Shift point L/R indicator**	for EPA use only.		n/a	0	A(1)	Enumeration								L' or 'R'		Light-Duty	Confirmatory Test	
SS-66	**Exception point code**	asterisk, 'N' or blank -- include this shift point speed in the VDA shift pattern calculations; 'Y' or 'X' -- do not include this shift point speed in the VDA shift pattern calculations		ExceptionPointCode	1..shiftPointNu mber	A(1)	Enumeration								*' (asterisk), 'N', blank, 'Y', 'X'		Light-Duty	Confirmatory Test	
SS-67	**Cruise point**	For EPA use only		n/a	0	A(1)	String	1	1								Light-Duty	Confirmatory Test	

Originator	Collection Point	Collection Type	Applicable Business Rules
Manufacturer	Front End	XML	LD-CFT-SS-BR009
Manufacturer	Front End	XML	LD-CFT-SS-BR001a LD-CFT-SS-BR001b LD-CFT-SS-BR006
Verify	Back End	Assigned	LD-CFT-SS-BR001a LD-CFT-SS-BR001b LD-CFT-SS-BR006
CDX From Users Info	Front End	XML	LD-CFT-SS-BR001a LD-CFT-SS-BR001b LD-CFT-SS-BR002 LD-CFT-SS-BR004 LD-CFT-SS-BR005 LD-CFT-SS-BR006
Manufacturer	Front End	XML	
EPA	Back End	Data Entry	
Manufacturer	Front End	XML	
Manufacturer	Front End	XML	
Manufacturer	Front End	XML	
Manufacturer	Front End	XML	
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Manufacturer	Front End	XML	
Manufacturer	Front End	XML	

Verify(Manufacturer when not new)	Front End	XML	LD-CFT-SS-BR007 LD-CFT-SS-BR008
Manufacturer	Front End	XML	LD-CFT-SS-BR007
Manufacturer	Front End	XML	
Manufacturer	Front End	XML	

Manufacturer	Front End	XML	LD-CFT-SS-BR003
EPA	Back End	Data Entry	
EPA	Back End	Data Entry	
EPA	Back End	XML	
EPA	Back End	Data Entry	

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EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value
Confirmatory Test Supplemental Information															
SI-0.5	**Process Code**	Select the desired process code for the current submission.	SupplementalInformationSubmission/ SupplementalInformationDetails	InformationProcessCode	1	1 per CT Supplemental Information	A(1)	Enumeration	1	1					
SI-1	**Manufacturer code**	The manufacturer code will be determined from the data submitter's CDX user login profile. The manufacturer code is an alpha-numeric code which identifies a unique vehicle manufacturer. This code is assigned by EPA during the manufacturer registration process.	SupplementalInformationSubmission/ SupplementalInformationDetails	EPAManufacturerCode	1	1 per CT Supplemental Information	A(3)	String	3	3	[A-Z0-9]{3}				
SI-2	**Vehicle ID**	Enter the applicable test vehicle identification number for this set of supplemental confirmatory test information. The vehicle ID is a unique, manufacturer-defined, alpha-numeric identification number that is assigned to each manufacturer test vehicle. The combination of test vehicle ID and vehicle configuration number entered here must be established in Verify's Test Vehicle Information database prior to submitting supplemental confirmatory test information.	SupplementalInformationSubmission/ SupplementalInformationDetails	VehicleIdentificationText	1	1 per CT Supplemental Information	A(20)	String	1	20					
SI-3	**Vehicle Configuration #**	Enter the applicable test vehicle configuration number for this set of supplemental confirmatory test information. The vehicle configuration number is used to denote multiple configurations of a single test vehicle ID. The combination of test vehicle ID and vehicle configuration number entered here must be established in Verify's Test Vehicle Information database prior to submitting supplemental confirmatory test information.	SupplementalInformationSubmission/ SupplementalInformationDetails	VehicleConfigurationNumber	1	1 per CT Supplemental Information	N(2)	Integer	1	2				0	99
SI-3.5	**Model Year**	Enter the model year for which the vehicle is being tested.	SupplementalInformationSubmission/ SupplementalInformationDetails	ModelYear	1	1 per CT Supplemental Information	D(4)	Date	4	4	yyyy			1970	2050
SI-4	**Curb weight**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.			1	1 per CT Supplemental Information	N(5)	Integer						0	14000

ID	Field	Description	Path	Element		Occurrence	Format	Type					Min	Max
SI-5	Drive axle weight w/ empty tank of fuel	Enter the actual or estimated drive axle weight with an empty fuel tank for this test vehicle configuration. The weight must be provided in units of pounds.	SupplementalInformationSubmission/ SupplementalInformationDetails	DriveAxleWeightEmptyTankValue	1	1 per CT Supplemental Information	N(5)	Integer					200	14,000
SI-6	Drive axle weight w/ full tank of fuel	Enter the actual or estimated drive axle weight with a full fuel tank for this test vehicle configuration. The weight must be provided in units of pounds.	SupplementalInformationSubmission/ SupplementalInformationDetails	DriveAxleWeightFullTankValue	1	1 per CT Supplemental Information	N(5)	Integer					200	14,000
SI-7	Test Drive Code	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	1	1 per CT Supplemental Information	N(1)	Enumeration						
SI-8	Steering Wheel Location	Select the applicable code specifying the location of the steering wheel for this test vehicle.	SupplementalInformationSubmission/ SupplementalInformationDetails	SteeringWheelLocationIdentifier	1	1 per CT Supplemental Information	A(1)	Enumeration						
SI-9	Displacement	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	1	1 per CT Supplemental Information	N(5,3)	Decimal			5	3		
SI-10	Engine type code	Select the applicable numeric code specifying the type of engine design for this test vehicle. For example, '1' = Otto spark. Other possible values include diesel, hybrid, gas turbine, fuel cell, etc.	SupplementalInformationSubmission/ SupplementalInformationDetails	LightDutyEngineTypeIdentifier	1	1 per CT Supplemental Information	N(2)	Enumeration						
SI-12	Equivalent test weight (ETW)	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	1	1 per CT Supplemental Information	N(5)	Integer					0	14000
SI-13	Equivalent test weight unit	Value will automatically be set to 'P' = pounds.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EPAGeneratedSupplementalInformationDetails	EquivalentTestWeightUnitIdentifier	1	1 per CT Supplemental Information	A(1)	String						
SI-14	Model code	Will be set automatically to '1' (sedan).	SupplementalInformationSubmission/ SupplementalInformationDetails/ EPAGeneratedSupplementalInformationDetails	ModelYear	1	1 per CT Supplemental Information	A(2)	String						
SI-15	Vehicle Type Description	Will be set automatically to '01' (Cert Emission Data).	SupplementalInformationSubmission/ SupplementalInformationDetails/ EPAGeneratedSupplementalInformationDetails	VehicleTypeDescriptionText	1	1 per CT Supplemental Information	N(2)	Integer						
SI-16	Front wheel tire pressure	Enter the front wheel tire pressure used for dynamometer testing of this test vehicle, in units of pounds per square inch.	SupplementalInformationSubmission/ SupplementalInformationDetails	FrontWheelTirePressureValue	1	1 per CT Supplemental Information	N(3)	Integer						

ID	Field	Description	Path	Element	Req	Cardinality	Format	Type	Min	Max					
SI-17	Rear wheel tire pressure	Enter the rear wheel tire pressure used for dynamometer testing of this test vehicle, in units of pounds per square inch.	SupplementalInformationSubmission/ SupplementalInformationDetails	RearWheelTirePressureValue	1	1 per CT Supplemental Information	N(3)	Integer							
SI-18	Rim and tire size	Enter the standard tire/rim size description as imprinted on the side wall of the tire.	SupplementalInformationSubmission/ SupplementalInformationDetails	RimAndTireSizeDescriptionText	1	1 per CT Supplemental Information	A(20)	String	1	20					
SI-19	Driver selectable transmission?	Does this test vehicle have a driver-selectable transmission?	SupplementalInformationSubmission/ SupplementalInformationDetails	DriverSelectableTransmissionIndicator	1	1 per CT Supplemental Information	A(1)	Enumeration							
SI-20	Transmission mode tested description	Enter a description of the driver-selectable transmission mode that should be used for this test. For example, drive in fully automatic mode or using the select shift mode. This field is required if 'Driver Selectable Transmission' = 'Y'.	SupplementalInformationSubmission/ SupplementalInformationDetails	DriverSelectableTransmissionDescriptionText	0	1 per CT Supplemental Information	A(50)	String	1	50					
SI-21	Transmission Configuration Code	The value for this field will be determined from the values entered for 'transmission type', 'transmission lockup', creeper gear', and 'number of transmission gears' that are part of the Test Vehicle Information dataset that was previously entered.	n/a	n/a	1	1 per CT Supplemental Information	N(2)	Enumeration							
SI-24	Vehicle purpose	Select the appropriate purpose for this test.			1	1 per CT Supplemental Information	N(2)	Enumeration							
SI-26	Nominal main tank capacity	Enter the nominal main fuel tank capacity of the test vehicle.	SupplementalInformationSubmission/ SupplementalInformationDetails	FuelTankCapacityMeasure	0	1 per CT Supplemental Information	N(4,1)	Decimal				4	1	0	999.9
SI-27	Fuel tank capacity unit	Select the applicable fuel tank units. 'G' = gallons; 'L' = liters	SupplementalInformationSubmission/ SupplementalInformationDetails	FuelTankCapacityUnitIdentifier	0	1 per CT Supplemental Information	A(1)	Enumeration							

			SupplementalInformationSubmission/ SupplementalInformationDetails		Verify Light-Duty Data Requirements												
SI-28	Nominal auxiliary tank capacity	Enter the nominal auxiliary tank capacity of the test vehicle.	SupplementalInformationSubmission/ SupplementalInformationDetails	AuxilliaryFuelTankCapacityMeasure	0	1 per CT Supplemental Information	N(4,1)	Decimal				4	1	0	999.9
SI-29	Electric dyno target coefficient A	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	0	1 per CT Supplemental Information	N(6,3)	Decimal				6	3	-999.999	999.999
SI-30	Electric dyno target coefficient B	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	0	1 per CT Supplemental Information	N(6,5)	Decimal				6	5	-9.99999	9.99999
SI-31	Electric dyno target coefficient C	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	0	1 per CT Supplemental Information	N(7,6)	Decimal				7	6	-9.999999	9.999999
SI-32	Electric dyno set coefficient A	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	0	1 per CT Supplemental Information	N(6,3)	Decimal				6	3	-999.999	999.999
SI-33	Electric dyno set coefficient B	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	0	1 per CT Supplemental Information	N(6,5)	Decimal				7	6	-9.999999	9.999999
SI-34	Electric dyno set coefficient C	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	0	1 per CT Supplemental Information	N(7,6)	Decimal				7	6	-9.999999	9.999999
SI-35	Shift Indicator Light Code	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	1	1 per CT Supplemental Information	A(1)	Enumeration							
SI-37	Target Coastdown Time	The 55 mph to 45 mph coastdown time (in seconds) from the track (target) coastdown. This field is optional. If a value is entered, this will trigger the need to conduct a 55-45 mph coastdown.	SupplementalInformationSubmission/ SupplementalInformationDetails	TargetCoastDownTimeValue	0	1 per CT Supplemental Information	N(5,2)	Decimal				5	2	-999.99	999.99
NEW SI-37.5	Nominal Hybrid Battery Voltage (Volts)	Enter the nominal hybrid battery voltage for this test vehicle in volts.	SupplementalInformationSubmission/ SupplementalInformationDetails	NominalHybridBatteryVoltageValue	0	1 per CT Supplemental Information	N(3)	Integer						0	999
NEW SI-37.6	Maximum Hybrid Battery Current (amps)	Enter the maximum hybrid battery system current for this test vehicle in amps.	SupplementalInformationSubmission/ SupplementalInformationDetails	MaximumHybridBatteryCurrentValue	0	1 per CT Supplemental Information	N(3)	Integer						0	999
SI-38	Canister loading?	Select 'Y' = Evaporative emission control canister is loaded with butane or gasoline vapor prior to the start of an emission or fuel economy test or 'N' = No loading required.	SupplementalInformationSubmission/ SupplementalInformationDetails	CanisterLoadingIndicator	1	1 per CT Supplemental Information	A(1)	Enumeration							
SI-39	Number of canisters	The number of evaporative emission control canisters on this test vehicle.	SupplementalInformationSubmission/ SupplementalInformationDetails	TotalCanisterCount	0	1 per CT Supplemental Information	N(2)	Integer						1	18

	Cannister Details	**Enter the working capacity and total volume for each cannister.**				**1..n**								
SI-40	**Canister(s) working capacity**	Enter the grams of hydrocarbon which are adsorbed and de-sorbed by loading and purging of the canister on this test vehicle.	SupplementalInformationSubmission/ SupplementalInformationDetails/ CanisterDetails	CanisterWorkingCapacityMeasure	0	1 per Canister Number per CT Supplemental Information	N(3)	Integer					0	999
SI-41	**Total canister volume**	Enter the total canister volume, in cubic centimeters, of activated carbon in the evaporative emission control canisters for this test vehicle.	SupplementalInformationSubmission/ SupplementalInformationDetails/ CanisterDetails	TotalCanisterVolumeMeasure	0	1 per Canister Number per CT Supplemental Information	N(6)	Integer					0	999999
	Engine Cooling Fan Placement Details	**Enter the primary and additional engine cooling fan placement code for each test procedure.**				**1..n**								
SI-41.5	**Test Procedure Codes Selected For EPA Confirmatory Testing**	Enter all applicable test procedure codes that have been selected for EPA confirmatory testing.	SupplementalInformationSubmission/ SupplementalInformationDetails/ SupplementalTestProcedureDetails	TestProcedureIdentifier	1	1..n per CT Supplemental Information	N(2)	Enumeration						
SI-41.6	**Number of UDDS/Highway/US06 Bags/Phases Conducted**	The number of UDDS/Highway/US06 bags/phases conducted for this test.			0	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(2)	Integer					1	99
SI-42	**Primary engine cooling fan placement code**	The numeric code specifying the position of the engine cooling fan during EPA confirmatory testing. A code must be entered for each test procedure.	SupplementalInformationSubmission/ SupplementalInformationDetails/ SupplementalTestProcedureDetails	PrimaryCoolingFanPlacementIdentifier	1	1 per entered Test Procedure per CT Supplemental Information	N(2)	Enumeration						

SI-44	Additional vehicle cooling fan placement code	The numeric code specifying the position of the vehicle side cooling fan during EPA confirmatory testing. A code must be entered for each test procedure.	SupplementalInformationSubmission/ SupplementalInformationDetails/ SupplementalTestProcedureDetails	AdditionalCoolingFanPlacementIdentifier	1	1 per entered Test Procedure per CT Supplemental Information	N(1)	Enumeration						
SI-44.5	Road Speed Fan Setup Specifications	Enter road speed fan setup specifications that include the following items and other information as necessary: 1. The distance from the vehicle bumper to the outlet of the road speed fan (between 12" and 35") 2. The vertical distance from the floor to the bottom/top of the fan (specify which should be used) 3. The horizontal offset from vehicle center line (e.g. offset the fan 3" toward the driver's side) This field is required when '20' (Road Speed Fan) is selected for Primary Engine Cooling Fan Placement Code (SI-42).	SupplementalInformationSubmission/ SupplementalInformationDetails/ SupplementalTestProcedureDetails	RoadSpeedFanSetupSpecificationsText	0	1 per entered Test Procedure per CT Supplemental Information	A(1000)	String						
SI-46	Shift schedule ID	The numeric code specifying the shift schedule to be used for EPA confirmatory testing of this test vehicle. Can be either a previously-entered manufacturer or EPA standard shift schedule.	SupplementalInformationSubmission/ SupplementalInformationDetails/ SupplementalTestProcedureDetails	ShiftScheduleIdentifier	0	1 per entered Test Procedure per CT Supplemental Information	A(4)	String	1	4	[A-Z0-9]{1,4}			
SI-47	Shift schedule database code	The system will assign a value of "A" for all sets of CT Supplemental Information.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EPAGeneratedSupplementalInformationDetails	ShiftScheduleDatabaseCode	1	1 per entered Test Procedure per CT Supplemental Information	A(1)	String						

SI-49	Shift schedule ID (for prep)	Enter the numeric code specifying the shift schedule to be used for the pre-conditioning drive cycle during EPA confirmatory testing of this test vehicle.	SupplementalInformationSubmission/ SupplementalInformationDetails/ SupplementalTestProcedureDetails	ShiftSchedulePreparationIdentifier	0	1 per entered Test Procedure per CT Supplemental Information	A(4)	String	1	4				
SI-49.5	E10 Evaporative Test Measurement Method	Enter E10 Measurement Method to be used for Running Loss and 2-Day/3-Day Hot Soak + Diurnal emissions only (e.g. for Tier 3/LEVIII tests). Method must agree with all Evaporative tests used for the tested Evaporative Family.	SupplementalInformationSubmission/ SupplementalInformationDetails/ SupplementalTestProcedureDetails	E10EvaporativeTestMeasurementMethodIdentifier	0	1 per entered Test Procedure per CT Supplemental Information	A(7)	String						
SI-49.7	Drive Cycle Speed Tolerance Criteria	Select the applicable value for Drive Cycle Speed Tolerance Criteria.	SupplementalInformationSubmission/ SupplementalInformationDetails/ SupplementalTestProcedureDetails	DriveCycleSpeedToleranceCriteriaIdentifier	1	1 per entered Test Procedure per CT Supplemental Information	A(8)	String						
SI-50	Vehicle odometer unit	The value for this field will be looked-up from the Test Vehicle Information that was previously entered. The vehicle odometer distance units for this test vehicle. 'M' = miles; 'K' = kilometers	SupplementalInformationSubmission/ SupplementalInformationDetails/ EPAGeneratedSupplementalInformationDetails	OdometerUnitsCode	1	1 per CT Supplemental Information	A(1)	Enumeration						
SI-51	Vehicle odometer correction factor	The value for this field will be looked-up from the Test Vehicle Information that was previously entered. The multiplicative numeric adjustment factor used in the equations to calculate "system" miles on this test vehicle.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EPAGeneratedSupplementalInformationDetails	CorrectionFactorValue	1	1 per CT Supplemental Information	N(5,4)	Decimal			5	4		
SI-52	Odometer Correction sign (+/-)	The value for this field will be looked-up from the Test Vehicle Information that was previously entered. A "+" or "-" symbol for the odometer correction sign is used to adjust the fuel economy of a test vehicle if the vehicle has over 6200 system miles.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EPAGeneratedSupplementalInformationDetails	CorrectionSignIdentifier	1	1 per CT Supplemental Information	A(1)	Enumeration						
SI-53	Wheel base	The distance between the parallel centerlines of the front and rear axle of this test vehicle. This is needed for setting the front and rear roll spacing for testing four wheel drive vehicles on a chassis dynamometer.	SupplementalInformationSubmission/ SupplementalInformationDetails	WheelBaseMeasure	1	1 per CT Supplemental Information	N(3)	Integer					0	999
SI-54	Wheel base unit	The wheel base units for the wheel base distance provided above for this test vehicle. 'in' = inches, or 'cm' = centimeters.	SupplementalInformationSubmission/ SupplementalInformationDetails	WheelBaseUnitsIdentifier	1	1 per CT Supplemental Information	A(2)	Enumeration						
SI-55	Test Vehicle Information Comments	Manufacturer defined.	SupplementalInformationSubmission/ SupplementalInformationDetails	TestVehicleCommentText	0	1 per CT Supplemental Information	A(1000)	String	1	1000				
	Exhaust Emissions Standards and Cert Levels entered for each Certification Region													

SI-55.5	**Test Group**	The test group that was entered on the original Confirmatory Test Decision Information (DI-7) will be picked up by Verify on the back-end.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EPAGeneratedSupplementalInformationDetails/ EPAGeneratedExhaustEmission CertificationLevel Details	TestGroupName	1	1 per CT Supplemental Information	A(12)	String	12	12						
SI-56	**Certification Region Code**	Select the applicable certification region codes for this exhaust standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	CertificationRegionCode	1	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(2)	Enumeration								
SI-90	**Certification/In-Use Code**	Verify will assign a default value of "C" (Certification) for all Supplemental Information standards.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	CertificationInUseCode	1	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(2)	Enumeration								
SI-91	**Vehicle Class**	Select the applicable vehicle class for this exhaust standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	VehicleClassIdentifier	1	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(4)	Enumeration								

SI-57A	Exhaust Emission Standard Level	Select the applicable standard level for this exhaust standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	ExhaustEmissionsStandardLevelIdentifier	1	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(5)	Enumeration								
SI-57A	Exhaust Emission Standard Level (cont.)														SI-57A	

SI-57A	**Exhaust Emission Standard Level (cont.)**														
SI-56.5	**Fuel**	Select the applicable fuel for this exhaust standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	FuelIdentifier	1	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(3)	Enumeration							
SI-92	**Test Procedure**	Enter the applicable test procedure for this exhaust emission standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	TestProcedureIdentifier	1	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	N(2)	Enumeration							

ID	Field Name	Description	XML Path	XML Element		Cardinality	Format	Data Type			Pattern				
SI-60	Useful Life Mileage	Select the applicable useful life mileage for this exhaust standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	UsefulLifeMileageIdentifier	1	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	N(3)	Enumeration							
SI-59	Test Result/Emission Name	Select the applicable emission name for this exhaust standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	TestResultIdentifier	1	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(16)	Enumeration							
SI-61	Emission Standard Value	This is a system-generated numeric field based on converting the text value entered by the manufacturer for "Emission Standard Value (Text)" (SI-62) .	SupplementalInformationSubmission/ SupplementalInformationDetails/ EPAGeneratedSupplementalInformationDetails/ EPAGeneratedExhaustEmissionCertificationLevelDetails	EmissionStandardValue	1	1..1 for each unique set of exhaust standard/DF info.	N(7,4)	Decimal				7	4	0	999.9999
SI-62	Emission Standard Value (Text)	Enter the applicable numeric value for this exhaust standard name including any additional digits that are necessary for proper rounding.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	ExhaustEmissionsStandardValueText	1	1..1 for each unique set of exhaust standard/DF info.	A(8)	Numeric string			([0-9]{1,3}[\.][0-9]{1,4})|([\.][0-9]{1,4})|([0-9]{1,3}[\.]?)				
SI-58	Exhaust Deterioration Factor Type	Select the applicable deterioration factor type for this exhaust standard name.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	DeteriorationFactorTypeIdentifier	1	1..1 for each unique set of exhaust standard/DF info.	A(4)	Enumeration							

Verify Light-Duty Data Requirements

ID	Name	Description	Path	Element	Occ	Requirements	Format	Data Type	Len Min	Len Max	Total	Frac	Low	High
SI-58.5	Using NMOG/NMHC Ratio?	If this is an NMOG standard, is the NMOG/NMHC ratio being used?	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	NMOGToNMHCRatioIndicator	0	1..1 for each unique set of exhaust standard/DF info.	A(1)	Enumeration						
SI-58.6	Ratio of NMOG/NMHC	If applicable, enter the value for the NMOG/NMHC ratio for this exhaust standard name.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	NMOGToNMHCRatioValue	0	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal			3	2	0.00	9.99
SI-63	Additive DF	If applicable, enter the additive deterioriation factor (DF) value for this exhaust standard name.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	AdditiveDeteriorationFactorValue	0	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal			7	6	0	9.999999
SI-64	Multiplicative DF	If applicable, enter the multiplicative deterioriation factor (DF) value for this exhaust standard name.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	MultiplicativeDeteriorationFactorValue	0	1..1 for each unique set of exhaust standard/DF info.	N(4,3)	Decimal			4	3	1	9.999
SI-93	Upward Diesel Adjustment Factor	If applicable, enter the upward diesel adjustment factor value for this exhaust standard name.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	UpwardDieselAdjustmentFactorValue	0	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal			7	6	-9.999999	9.999999
SI-94	Downward Diesel Adjustment Factor	If applicable, enter the downward diesel adjustment factor value for this exhaust standard name.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	DownwardDieselAdjustmentFactorValue	0	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal			7	6	-9.999999	9.999999
SI-65	Reactivity Factor (RAF)	If applicable, enter the reactivity factor for this exhaust standard name.	SupplementalInformationSubmission/ SupplementalInformationDetails/ ExhaustEmissionsStandardDetails	ReactivityFactorValue	0	1..1 for each unique set of exhaust standard/DF info.	N(5)	Integer					0	99,999
SI-67	Exhaust/Evaporative Emission Standard Comments	Enter any additional comments for the exhaust or evaporative standards for this test vehicle.	SupplementalInformationSubmission/ SupplementalInformationDetails	EmissionsStandardCommentText	0	1 per test vehicle configuration	A(1000)	String	1	1000				
Evaporative and Refueling Emission Standards and Cert Levels Entered For Each Certified Region Code														
SI-95	Evaporative/Refueling Family Name	The evaporative/refueling family that was entered on the original Confirmatory Test Decision Information (DI-8) will be picked up by Verify on the back-end.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EPAGeneratedSupplementalInformationDetails/ EPAGeneratedEvaporativeEmissionCertificationLevelDetails	EvaporativeRefuelingFamilyName	0	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(12)	String	12	12				

SI-96	**Certification Region Code**	Select the applicable certification region codes for this evaporative standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EvaporativeEmissionsStandardDetails	CertificationRegionCode	0	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	0..n	A(2)	Enumeration							
SI-97	**Certification/In-Use Code**	Verify will assign a default value of "C" (Certification) for all Supplemental Information standards.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EvaporativeEmissionsStandardDetails	CertificationInUseCode	0	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	0..n	A(2)	Enumeration							
SI-57B	**Evaporative/Refueling Standard Level**	Select the applicable standard level for this evaporative standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EvaporativeEmissionsStandardDetails	EvaporativeEmissionsStandardLevelIdentifier	0	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	0..n	A(4)	Enumeration							
SI-80	**Fuel**	Select the applicable fuel for this evaporative standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EvaporativeEmissionsStandardDetails	FuelIdentifier	0	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	0..n	A(3)	Enumeration							

SI-98	**Test Procedure**	Enter the applicable test procedure for this evaporative emission standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EvaporativeEmissionsStandardDetails	TestProcedureIdentifier	1	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	N(2)	Enumeration							
SI-72	**Useful Life Mileage**	Select the applicable useful life mileage for this evaporative standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EvaporativeEmissionsStandardDetails	UsefulLifeMileageIdentifier	TRUE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	N(3)	Enumeration							
SI-71	**Test Result/Emission Name**	Select the applicable emission name for this evaporative standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EvaporativeEmissionsStandardDetails	TestResultIdentifier	TRUE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(16)	Enumeration							

			Description	XPath	Element		Required	Cardinality	Type	Format	Min	Max	Pattern	Total Digits	Decimal	Min Value	Max Value
SI-74	**Evaporative Emission Standard Value**		This is a system-generated numeric field based on converting the text value entered by the manufacturer for "Evaporative Emission Standard Value (Text)" (SI-75) .	SupplementalInformationSubmission/ SupplementalInformationDetails/ EPAGeneratedSupplementalInformationDetails/ EPAGeneratedEvaporativeEmissionCertificationLevelDetails	EvaporativeEmissionsStandardValue	1	1..1 for each unique set of evap standard/DF info.	N(7,4)	Decimal				7	4	0.0000	999.9999
SI-75	**Evaporative Emission Standard Value (Text)**		Enter the applicable numeric value for this evaporative standard name including any additional digits that are necessary for proper rounding.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EvaporativeEmissionsStandardDetails	EvaporativeEmissionsStandardValueText	1	1..1 for each unique set of evap standard/DF info.	A(8)	String	1	8	([0-9]{1,3}[\.][0-9]{1,4})|([\.][0-9]{1,4})|([0-9]{1,3}[\.]?)				
SI-73	**Evaporative Deterioration Factor Type**		Select the applicable deterioration factor type for this evaporative standard.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EvaporativeEmissionsStandardDetails	DeteriorationFactorTypeIdentifier	TRUE	1..1 for each unique set of evap standard/DF info.	A(4)	Enumeration							
SI-76	**Additive DF**		Enter the additive deterioriation factor (DF) value for this evaporative standard name.	SupplementalInformationSubmission/ SupplementalInformationDetails/ EvaporativeEmissionsStandardDetails	AdditiveDeteriorationFactorValue	0	1..1 for each unique set of evap standard/DF info.	N(7,6)	Decimal				7	6	0	9.999999

Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
Look-up Values N = New dataset C = Correction of existing Verify dataset	Light-Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test		CDX From Users Info	Front End	XML	LD-CFT-SI-BR004a LD-CFT-SI-BR004b LD-CFT-SI-BR005 LD-CFT-SI-BR010 LD-CFT-SI-BR011 LD-CFT-SI-BR012 LD-CFT-SI-BR013
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR001a LD-CFT-SI-BR001b LD-CFT-SI-BR004a LD-CFT-SI-BR004b LD-CFT-SI-BR012 LD-CFT-SI-BR013
	Light Duty	Confirmatory Test	E.g. "01"	Manufacturer	Front End	XML	LD-CFT-SI-BR001a LD-CFT-SI-BR001b LD-CFT-SI-BR004a LD-CFT-SI-BR004b LD-CFT-SI-BR012 LD-CFT-SI-BR013
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR004a LD-CFT-SI-BR004b LD-CFT-SI-BR012 LD-CFT-SI-BR013
	Light Duty	Confirmatory Test	VI-29	Verify	**Back End**	Pre Existing Data	

	Light Duty	Confirmatory Test	200 <= WEIGHT <= 14,000	Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test	200 <= WEIGHT <= 14,000	Manufacturer	Front End	XML	
Look-Up Values: 4 = 4-wheel Drive F = 2-wheel Drive, front R = 2-wheel drive, rear P= Part-time 4-wheel drive A = All wheel drive	Light Duty	Confirmatory Test	VI-13	Verify	Back End	Pre Existing Data	
Look-Up Values: L = Left-hand side R = Right-hand side	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test	VI-22 XX.XXX in Liters	Verify	Back End	Pre Existing Data	
Look-Up Values: 1 = Otto Spark 2 = Stratified Charge 3 = Diesel 4 = Gas Turbine 5 = Rankine 6 = Stirling 7 = Hybrid 8 = Fuel Cell 99 = Other	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test	VI-30 check range between 00000 <= WEIGHT <= 14000	Verify	Back End	Pre Existing Data	
P = Pounds	Light Duty	Confirmatory Test	Assigned default value = "P"	Verify	Back End	Assigned	
1 = Sedan	Light Duty	Confirmatory Test	Assigned default value = "1"	Verify	Back End	Assigned	
1 = Cert Emission Data	Light Duty	Confirmatory Test	Assigned default value = "1"	Verify	Back End	Assigned	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	

	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR002
0 - C4 MANUAL 4-SPEED(CREEPER) 1 - A AUTOMATIC <3 OR >8-SPEED (NO LOCKUP) 2 - M3 MANUAL 3-SPEED(NO CREEPER) 3 - M4 MANUAL 4-SPEED(NO CREEPER) 4 - M5 MANUAL 5-SPEED(NO CREEPER) 5 - SA SEMI-AUTOMATIC 6 - A3 AUTOMATIC 3-SPEED(NO LOCKUP) 7 - L3 AUTOMATIC 3-SPEED (LOCKUP) 8 - A4 AUTOMATIC 4-SPEED(NO LOCKUP) 9 - L4 AUTOMATIC 4-SPEED (LOCKUP) 10 - C5 MANUAL 5-SPEED(CREEPER) 12 - C3 MANUAL 3-SPEED (CREEPER) 15 - SA2 SEMI-AUTOMATIC 2-SPEED 16 - SA3 SEMI-AUTOMATIC 3-SPEED 17 - SA4 SEMI-AUTOMATIC 4-SPEED 18 - SA5 SEMI-AUTOMATIC 5-SPEED 20 - M6 MANUAL 6-SPEED(NO CREEPER) 21 - A5 AUTOMATIC 5-SPEED(NO LOCKUP) 22 - L5 AUTOMATIC 5-SPEED (LOCKUP) 23 - C6 MANUAL 6-SPEED(CREEPER) 24 - A6 AUTOMATIC 6-SPEED(NO LOCKUP) 25 - SA6 SEMI-AUTOMATIC 6-SPEED 26 - L6 AUTOMATIC 6-SPEED (LOCKUP) 27 - L7 AUTOMATIC 7-SPEED (LOCKUP) 28 - SA7 SEMI-AUTOMATIC 7-SPEED 29 - A7 AUTOMATIC 7-SPEED(NO CREEPER) 30 - M7 MANUAL 7-SPEED(NO CREEPER) 31 - C7 MANUAL 7-SPEED(CREEPER) 32 - L8 AUTOMATIC 8-SPEED (LOCKUP) 33 - SA8 SEMI-AUTOMATIC 8-SPEED 34 - A8 AUTOMATIC 8-SPEED(NO LOCKUP) 35 - M8 MANUAL 8-SPEED(NO CREEPER) 36 - C8 MANUAL 8-SPEED (CREEPER) 37 - M MANUAL <3 OR >8-SPEED 40 - CA CVT/Automatic 1-SPEED (NO CREEPER) 51 - AM2 AUTOMATIC-MANUAL 2-SPEED 52 - AM3 AUTOMATIC-MANUAL 3-SPEED 53 - AM4 AUTOMATIC-MANUAL 4-SPEED 54 - AM5 AUTOMATIC-MANUAL 5-SPEED 55 - AM6 AUTOMATIC-MANUAL 6-SPEED 56 - AM7 AUTOMATIC-MANUAL 7-SPEED 57 - AM8 AUTOMATIC-MANUAL 8-SPEED 58 - AM AUTOMATIC-MANUAL <2 OR >8-SPEED 99 - OTHER	Light Duty	Confirmatory Test	VI-36, VI-38, VI-39, VI-40	Verify	Back End	Pre Existing Data	
'01' = Emission Data Vehicle (EDV) '31' = Fuel Economy	Light Duty	Confirmatory Test	DI-25.1	Verify	Back End	Pre Existing Data	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR017
'G' = gallons 'L' = liters	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR017

	Light Duty	Confirmatory Test			Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test	VI-41	Verify	Back End	Pre Existing Data	
	Light Duty	Confirmatory Test	VI-42	Verify	Back End	Pre Existing Data	
	Light Duty	Confirmatory Test	VI-43	Verify	Back End	Pre Existing Data	
	Light Duty	Confirmatory Test	VI-44	Verify	Back End	Pre Existing Data	
	Light Duty	Confirmatory Test	VI-45	Verify	Back End	Pre Existing Data	
	Light Duty	Confirmatory Test	VI-46	Verify	Back End	Pre Existing Data	
Look-Up Table Values '1' = not equipped '2' = equipped, not shifted by SIL; '3' = equipped, shifted by SIL; '5' = equipped, shifted by Survey Schedule.	Light Duty	Confirmatory Test	VI-14	Verify	Back End	Pre Existing Data	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR026
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR027
Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR003

	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR003
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR003
2 = CVS 75 AND LATER (W/O CAN. LOAD) 3 = HWFE (HIGHWAY TEST) 9 = HWY80 (80 MPH HIGHWAY TEST) 10 = IDLE CO 11 = COLD CO 15 = SPITBACK TEST 16 = Hot 1435 LA92 21 = FED FUEL 2 DAY EXH (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (ORVR) (BUTANE) 25 = CA FUEL 2 DAY EXH (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EXH (BUTANE LOAD) 32 - FED FUEL RUNNING LOSS 34 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 35 = CA FUEL 3 DAY EXH (BUTANE LOAD) 37 = CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EXH(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (ORVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EXH (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEG(F) EXHAUST TEST 52 = FED FUEL 50 DEG(F) EXHAUST TEST 60 = AC17 - MANUAL A/C CONTROLS 61 = AC17 - AUTOMATIC A/C CONTROLS 64 = EVAP CARB FUEL ONLY (RIG) TEST 65 = EVAP CANISTER BLEED TEST 66 = LEAK TEST - EVAP FUEL SYSTEM OBD 67 = LEAK TEST - PORT NEAR CANISTER 68 = LEAK TEST - PORT NEAR FUEL PIPE 69 = LEAK TEST - EVAP GAS CAP 72 = CST TWO SPEED IDLE TEST 76 = CST PRECD 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 83 = Charge Depleting US06 84 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 20 Degree F FTP 87 = A/C Idle Test- Manual A/C 88 = A/C Idle Test- Automatic A/C 90 = US06 95 = SC03 96 = US06 Bag 2 Only	Light Duty	Confirmatory Test	Need to use full list of Test Procedures now instead of abbreviated list (below) that is currently being used.	Manufacturer	Front End	XML	LD-CFT-SI-BR004a LD-CFT-SI-BR004b
	Light-Duty	Confirmatory Test		Verify	Back End	Pre Existing Data	N/A
1 = One Small Fan - Up - Front 2 = One Small Fan - Down - Front 3 = One Small Fan - Up - Rear 4 = One Small Fan - Down - Rear 5 = One Large Fan - Up - Front (USO6 Only) 6 = One Large Fan - Down - Front (USO6 Only) 7 = One Large Fan - Up - Rear (USO6 Only) 8 = One Large Fan - Down - Rear (USO6 Only) 9 = Other (see MFR's instructions) 10 = None 20 = Road Speed Fan (width 31.5" x height 24")	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	

			Verify Light-Duty Data Requirements				
0 None (default) 1 One Small Fan - Down - Passenger Side 2 One Small Fan - Down - Driver Side 3 One Small Fan - Up - Rear 4 One Small Fan - Down - Rear 5 One Large Fan - Up - Front (USO6 Only) 6 One Large Fan - Down - Front (USO6 Only) 7 One Large Fan - Up - Rear (USO6 Only) 8 One Large Fan - Down - Rear (USO6 Only) 9 Other (see MFR's instructions)	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light-Duty	Confirmatory Test	*** Send to Lab via STARDATA table NEW BR: If Primary Engine Cooling Fan Placement Code (SI-42) equals '20' (Road Speed Fan) then Road Speed Fan Setup Specifications (SI-44.5) is required.	Manufacturer	Front End	XML	LD-CFT-SI-BR033
Valid Manufacturer Shift Schedule ID -- or -- Standard EPA Shift Schedule ID: FTA = FTP (Automatic) FTS = FTP (Manual w/ SIL) FT3 = FTP (Manual 3-speed) FT4 = FTP (Manual 4-speed) FT5 = FTP (Manual 5-speed) FT6 = FTP (Manual 6-speed) HWA = Highway FE (Automatic) HWS = Highway FE (Manual w/ SIL) HW3 = Highway FE (Manual 3-speed) HW4 = Highway FE (Manual 4-speed) HW5 = Highway FE (Manual 5-speed) HW6 = Highway FE (Manual 6-speed) US6A = US06 (Automatic) SC3A = SC03 (Automatic) 0001 = FTP (FT3) 0002 = FTP (FT4) 0003 = FTP (FT5) 0004 = FTP (FT6) 0005 = FTP (FTA) 0006 = FTP (FTS) 0007 = HWFE (HW3) 0008 = HWFE (HW4) 0009 = HWFE (HW5) 0010 = HWFE (HW6) 0011 = HWFE (HWA) 0012 = HWFE (HWS) 0013 = SCC#1 (SCCA)	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR005 LD-CFT-SI-BR016
A	Light Duty	Confirmatory Test	Default to "A"	Verify	Back End	Assigned	LD-CFT-SI-BR005

	Light Duty	Confirmatory Test			Manufacturer	Front End	XML	
ACTUAL = Actual Total Hydrocarbon Equivalent Measurement (with speciation) CALC = Calculated (1.08 x FID Total Hydrocarbons) FID-EPA = Actual FID w/o Speciation (EPA Only)	Light Duty	Confirmatory Test	This field is submitted in Test Information. ****Add this to the LOD STARDATA Test Request table which is written to upon SI submission.	Verify	Back End	Pre Existing Data	
PART86 = Used Part 86 (+/- 2 mph, +/- 1 sec) PART1066 = Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Light Duty	Confirmatory Test	This field is submitted in Test Information. ****Add this to the LOD STARDATA Test Request table which is written to upon SI submission.	Verify	Back End	Pre Existing Data	
Look-Up Values: 'M' = miles 'K' = kilometers	Light Duty	Confirmatory Test	VI-19	Verify	Back End	Assigned	
	Light Duty	Confirmatory Test	VI-17	Verify	Back End	Assigned	
Look-Up Values: '+' '-'	Light Duty	Confirmatory Test	VI-18	Verify	Back End	Assigned	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
Look-Up Values: 'in' = inches, 'cm' = centimeters	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR006
	Light Duty						**SI-BR18**

	Light Duty	Confirmatory Test	The test group should be pulled in from the Confirmatory Test Decision Information stored on the back-end (DI-7)	Verify	Back End	Assigned	LD-CFT-SI-BR018
CA = California + CAA Section 177 states FA = Federal	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018
C = Certification	Light Duty	Confirmatory Test	Assign a default value = "C"	Verify	Front End	Assigned	LD-CFT-SI-BR014 LD-CFT-SI-BR018
For Federal or California Certification Region Codes: LDV - LDV/Passenger Car LDT1 - LDT1 (LVW-3750, GVW 0-6000), LDT2 - LDT2 (LVW 3751-5750, GVW 0-6000), LDVT - LDV and LDT1 For Federal Certification Region Code: LDT3 - LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000), LDT4 - LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000), MDPV - MDPV (Federal Tier 2, GVWR 8501-10000), HDV1 - HDV1 (Federal HD chassis Class 2b GVW 8501-10000), HDV2 - HDV2 (Federal HD chassis Class 3 GVW 10001-14000) For California Certification Region Code: M6 - MDV6 (Cal. LEV 2/3 MDV GVW 8501-10000), M7 - MDV7 (Cal. LEV 2/3 MDV GVW 10001-14000)	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018 LD-CFT-SI-BR025

			Verify Light-Duty Data Requirements				
B1 = Federal Tier 2 Bin 1 B2 = Federal Tier 2 Bin 2 B3 = Federal Tier 2 Bin 3 B4 = Federal Tier 2 Bin 4 B5 = Federal Tier 2 Bin 5 B6 = Federal Tier 2 Bin 6 B7 = Federal Tier 2 Bin 7 B8 = Federal Tier 2 Bin 8 B9 = Federal Tier 2 Bin 9 B10 = Federal Tier 2 Bin 10 B11 = Federal Tier 2 Bin 11 HDV1 = HDV1 (Federal HD chassis Class 2b GVW 8501-10000) HDV2 = HDV2 (Federal HD chassis Class 3 GVW 10001-14000) L2 = California LEV-II LEV L2OP = California LEV-II LEV Optional U2 = California LEV-II ULEV S2 = California LEV-II SULEV ZEV = California ZEV PZEV = California PZEV							LD-CFT-SI-BR018 LD-CFT-SI-BR024 LD-CFT-SI-BR034 LD-CFT-SI-BR035
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	
L2LEV160 - California LEV-II LEV160 L2ULEV125 - California LEV-II ULEV125 L2SULEV30 - California LEV-II SULEV30 L2LEV395 - California LEV-II LEV395 L2ULEV340 - California LEV-II ULEV340 L2LEV630 - California LEV-II LEV630 L2ULEV570 - California LEV-II ULEV570 L3LEV160 - California LEV-III LEV160 L3ULEV125 - California LEV-III ULEV125 L3ULEV70 - California LEV-III ULEV70 L3ULEV50 - California LEV-III ULEV50 L3SULEV30 - California LEV-III SULEV30 L3SULEV20 - California LEV-III SULEV20 L3LEV395 - California LEV-III LEV395 L3ULEV340 - California LEV-III ULEV340 L3ULEV250 - California LEV-III ULEV250 L3ULEV200 - California LEV-III ULEV200 L3SULEV170 - California LEV-III SULEV170 L3SULEV150 - California LEV-III SULEV150 L3LEV630 - California LEV-III LEV630 L3ULEV570 - California LEV-III ULEV570 L3ULEV400 - California LEV-III ULEV400 L3ULEV270 - California LEV-III ULEV270 L3SULEV230 - California LEV-III SULEV230 L3SULEV200 - California LEV-III SULEV200 OT = Other T1 = Federal Tier 1 (for use by ICIs only)							

T3B160 - Federal Tier 3 Bin 160 T3B125 - Federal Tier 3 Bin 125 T3B110 - Federal Tier 3 Transitional Bin 110 T3B85 - Federal Tier 3 Transitional Bin 85 T3SULEV30 – Federal Tier 3 Transitional LEV-II SULEV30 Carryover T3B70 - Federal Tier 3 Bin 70 T3B50 - Federal Tier 3 Bin 50 T3B30 - Federal Tier 3 Bin 30 T3B20 - Federal Tier 3 Bin 20 T3B0 - Federal Tier 3 Bin 0 HDV2B395 - Federal Tier 3 HD Class 2b Transitional Bin 395 HDV2B340 - Federal Tier 3 HD Class 2b Transitional Bin 340 HDV2B250 - Federal Tier 3 HD Class 2b Bin 250 HDV2B170 - Federal Tier 3 HD Class 2b Bin 170 HDV2B150 - Federal Tier 3 HD Class 2b Bin 150 HDV2B0 - Federal Tier 3 HD Class 2b Bin 0 HDV3B630 - Federal Tier 3 HD Class 3 Transitional Bin 630 HDV3B570 - Federal Tier 3 HD Class 3 Transitional Bin 570 HDV3B400 - Federal Tier 3 HD Class 3 Bin 400 HDV3B270 - Federal Tier 3 HD Class 3 Bin 270 HDV3B230 - Federal Tier 3 HD Class 3 Bin 230 HDV3B200 - Federal Tier 3 HD Class 3 Bin 200 HDV3B0 - Federal Tier 3 HD Class 3 Bin 0			NEW Business Rule : 'T3B110', 'T3B85' and 'T3SULEV30' are not allowed for Model Year (SI-3.5) 2020 and later. NEW Business Rule : 'HDV2B395', 'HDV2B340', 'HDV3B630' and 'HDV3B570' are not allowed for Model Year (SI-3.5) 2022 and later.				
G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018 LD-CFT-SI-IB001a
2 = CVS 75 AND LATER (W/O CAN. LOAD) 3 = HWFE (HIGHWAY TEST) 9 = HWY80 (80 MPH HIGHWAY TEST) 10 = IDLE CO 11 = COLD CO 15 = SPITBACK TEST 16 = Hot 1435 LA92 21 = FED FUEL 2 DAY EXH (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (ORVR) (BUTANE) 25 = CA FUEL 2 DAY EXH (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EXH (BUTANE LOAD) 32 - FED FUEL RUNNING LOSS 34 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 35 = CA FUEL 3 DAY EXH (BUTANE LOAD) 37 = CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EXH(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (ORVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EXH (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEG(F) EXHAUST TEST 52 = FED FUEL 50 DEG(F) EXHAUST TEST 60 = AC17 - MANUAL A/C CONTROLS 61 = AC17 - AUTOMATIC A/C CONTROLS 64 = EVAP CARB FUEL ONLY (RIG) TEST 65 = EVAP CANISTER BLEED TEST 66 = LEAK TEST - EVAP FUEL SYSTEM OBD 67 = LEAK TEST - PORT NEAR CANISTER 68 = LEAK TEST - PORT NEAR FUEL PIPE 69 = LEAK TEST - EVAP GAS CAP 72 = CST TWO SPEED IDLE TEST 76 = CST PRECD 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 83 = Charge Depleting US06 84 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 20 Degree F FTP 87 = A/C Idle Test- Manual A/C 88 = A/C Idle Test- Automatic A/C 90 = US06 95 = SC03 96 = US06 Bag 2 Only	Light-Duty	Confirmatory Test		Manufacturer	Front end	XML	LD-CFT-SI-BR018

4 = 4,000 miles 50 = 50,000 miles 100 = 100,000 miles 120 = 120,000 miles 150 = 150,000 miles	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018
HC-TOTAL (Total Hydrocarbon) HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only) CO (Carbon Monoxide) CO2 (Carbon Dioxide) CREE (Carbon-Related Exhaust Emissions) OPT-CREE (Optional Carbon-Related Exhaust Emissions) NOX (Nitrogen Oxides) PM (Particulate Matter) PM-COMP (SFTP Composite Particulate Matter) HC-NM (Non-methane Hydrocarbon) OMHCE (Organic material Hydrocarbon equivalent) OMNMHCE (Organic material non-methane Hydrocarbon equivalent) NMOG (Non-methane organic gases (California)) HCHO (Formaldehyde) H3C2HO (Acetaldehyde) HC-NM+NOX (SFTP Non-methane Hydrocarbon+Nitrogen Oxides for US06 or SC03) HC-NM+NOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides) CO-COMP (SFTP Composite Carbon Monoxide) NMOG+NOX (Non-methane Organic Gases Plus Nitrogen Oxides) NMOG+NOX-COMP (SFTP Composite Non-methane Organic Gases Plus Nitrogen Oxides) ETHANOL (C2H5OH- Ethanol) FE BAG 1 (Bag 1 Fuel Economy) FE BAG 2 (Bag 2 Fuel Economy) FE BAG 3 (Bag 3 Fuel Economy) FE BAG 4 (Bag 4 Fuel Economy) CO2 BAG 1 (Bag 1 Carbon Dioxide) CO2 BAG 2 (Bag 2 Carbon Dioxide) CO2 BAG 3 (Bag 3 Carbon Dioxide) CO2 BAG 4 (Bag 4 Carbon Dioxide) MFR FE (Manufacturer Fuel Economy) HC (Hydrocarbon for Running Loss and ORVR) METHANE (CH4) (Methane) METHANE-COMB (Combined CH4 for HD 2b/3 vehicles only) METHANOL (CH3OH) (Methanol) N2O (Nitrous Oxide) N2O-COMB (Combined Nitrous Oxide for HD 2b/3 vehicles only) SPITBACK (Spitback Hydrocarbon in grams) DT-IWRR (Drive Trace Inertia Work Ratio Rating) DT-ASCR (Drive Trace Absolute Speed Change Rating) DT-EER (Drive Trace Energy Economy Rating) LEAK-DIA - Effective Leak Diameter (inches) LEAK-GAS CAP - Gas Cap Leakage (cc/min) Allowed For Charge Depleting Test Procedures Only: AMP-HRS (Integrated Amp-hours) START-SOC (System Start State of Charge Watt-hours) END-SOC (System End State of Charge Watt-hours) ACT-DISTANCE (Actual Distance Driven (miles)) AS-VOLT (Average System Voltage)	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018 LD-CFT-SI-BR028 LD-CFT-SI-BR020 LD-CFT-SI-BR022 LD-CFT-SI-IB003a
	Light Duty	Confirmatory Test		Verify	Back End	Assigned	LD-CFT-SI-BR018
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018
MFRA = Mfr. Assigned EPAA = EPA Assigned MFRD = Mfr. Determined AGED = Aged components installed In the emission data vehicle	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018

Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR008 LD-CFT-SI-BR018
	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR009 LD-CFT-SI-BR018
	Light Duty	Confirmatory Test	use for NMOG, Methane. Note: for Tier 2 (Bin 1-11) emissions it will be defaulted to 1.0 for NMOG and 0.0 for Methane	Manufacturer	Front End	XML	LD-CFT-SI-BR018
	Light Duty	Confirmatory Test	Data type exists	Manufacturer	Front End	XML	LD-CFT-SI-BR018
							SI-BR19
	Light Duty	Confirmatory Test	The evaporative/refueling family name should be pulled in from the Confirmatory Test Decision Information stored on the back-end (DI-8)	Verify	Back End	Assigned	LD-CFT-SI-BR019

CA=California + CAA Section 177 states; FA=Federal	Light Duty	Confirmatory Test	Need to assign a new data element number and insert in schema since SI-56 is for the exhaust standards, not evap.	Manufacturer	Front End	XML	LD-CFT-SI-BR019
C = Certification	Light Duty	Confirmatory Test	Assign a default value = "C"	Verify	Front End	Assigned	LD-CFT-SI-BR015 LD-CFT-SI-BR019
T1 - Federal Tier 1 Evap T2 - Federal Tier 2 Evap T3 - Federal Tier 3 Evap T3-3Z - Federal Tier 3 LEV-III Zero Evap (Option 1) Carryover F2 - Federal LEV-II Evap C2 - California LEV-II Evap ZZ - California LEV-II Zero Evap 3Z = California LEV-III Zero Evap (Option 1) 4Z = California LEV-III Zero Evap (Option 2) HD-2D = Federal Heavy-Duty 2-Day Evap (1.75 grams) HD-3D = Federal Heavy-Duty 3-Day Evap (1.4 grams) OT = Other	Light Duty	Confirmatory Test	Note- T1 previously called ENHA in CFEIS NEW Business Rule : 'T3-3Z' is not allowed for Model Year (SI-3.5) 2022 and later.	Manufacturer	Front End	XML	LD-CFT-SI-BR019 LD-CFT-SI-BR036
G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR019

			Verify Light-Duty Data Requirements				

2 = CVS 75 AND LATER (W/O CAN. LOAD)
3 = HWFE (HIGHWAY TEST)
9 = HWY80 (80 MPH HIGHWAY TEST)
10 = IDLE CO
11 = COLD CO
15 = SPITBACK TEST
16 = Hot 1435 LA92
21 = FED FUEL 2 DAY EXH (BUTANE LOAD)
23 = FED FUEL 2 DAY EVAP (BUTANE)
24 = FED FUEL REFUEL (ORVR) (BUTANE)
25 = CA FUEL 2 DAY EXH (BUTANE LOAD)
27 = CA FUEL 2 DAY EVAP (BUTANE LOAD)
31 = FED FUEL 3 DAY EXH (BUTANE LOAD)
32 - FED FUEL RUNNING LOSS
34 = FED FUEL 3 DAY EVAP(BUTANE LOAD)
35 = CA FUEL 3 DAY EXH (BUTANE LOAD)
37 = CA FUEL RUNNING LOSS
38 = CA FUEL 3 DAY EVAP (BUTANE LOAD)
41 = FED FUEL 2 DAY EXH(HEAT TO LOAD)
43 = FED FUEL 2DAY EVAP(HEAT TO LOAD)
44 = FED REFUEL (ORVR) (HEAT TO LOAD)
45 = CA FUEL 2 DAY EXH (HEAT TO LOAD)
47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD)
51 = CA FUEL 50 DEG(F) EXHAUST TEST
52 = FED FUEL 50 DEG(F) EXHAUST TEST
60 = AC17 - MANUAL A/C CONTROLS
61 = AC17 - AUTOMATIC A/C CONTROLS
64 = EVAP CARB FUEL ONLY (RIG) TEST
65 = EVAP CANISTER BLEED TEST
66 = LEAK TEST - EVAP FUEL SYSTEM OBD
67 = LEAK TEST - PORT NEAR CANISTER
68 = LEAK TEST - PORT NEAR FUEL PIPE
69 = LEAK TEST - EVAP GAS CAP
72 = CST TWO SPEED IDLE TEST
76 = CST PRECD 2 SPD IDLE (EPA ONLY)
81 = Charge Depleting UDDS
83 = Charge Depleting US06
84 = Charge Depleting Highway
85 = Charge Depleting SC03
86 = Charge Depleting 20 Degree F FTP
87 = A/C Idle Test- Manual A/C
88 = A/C Idle Test- Automatic A/C
90 = US06
95 = SC03
96 = US06 Bag 2 Only

| Light-Duty | Confirmatory Test | | Manufacturer | Front end | XML | LD-CFT-SI-BR019 |

4 = 4,000 miles
50 = 50,000 miles
100 = 100,000 miles
120 = 120,000 miles
150 = 150,000 miles

| Light Duty | Confirmatory Test | | Manufacturer | Front End | XML | LD-CFT-SI-BR019 |

HC-TOTAL (Total Hydrocarbon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)
CO (Carbon Monoxide)
CO2 (Carbon Dioxide)
CREE (Carbon-Related Exhaust Emissions)
OPT-CREE (Optional Carbon-Related Exhaust Emissions)
NOX (Nitrogen Oxides)
PM (Particulate Matter)
PM-COMP (SFTP Composite Particulate Matter)
HC-NM (Non-methane Hydrocarbon)
OMHCE (Organic material Hydrocarbon equivalent)
OMNMHCE (Organic material non-methane Hydrocarbon equivalent)
NMOG (Non-methane organic gases (California))
HCHO (Formaldehyde)
H3C2HO (Acetaldehyde)
HC-NM+NOX (SFTP Non-methane Hydrocarbon+Nitrogen Oxides for US06 or SC03)
HC-NM+NOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides)
CO-COMP (SFTP Composite Carbon Monoxide)
NMOG+NOX (Non-methane Organic Gases Plus Nitrogen Oxides)
NMOG+NOX-COMP (SFTP Composite Non-methane Organic Gases Plus Nitrogen Oxides)
ETHANOL (C2H5OH- Ethanol)
FE BAG 1 (Bag 1 Fuel Economy)
FE BAG 2 (Bag 2 Fuel Economy)
FE BAG 3 (Bag 3 Fuel Economy)
FE BAG 4 (Bag 4 Fuel Economy)
CO2 BAG 1 (Bag 1 Carbon Dioxide)
CO2 BAG 2 (Bag 2 Carbon Dioxide)
CO2 BAG 3 (Bag 3 Carbon Dioxide)
CO2 BAG 4 (Bag 4 Carbon Dioxide)
MFR FE (Manufacturer Fuel Economy)
HC (Hydrocarbon for Running Loss and ORVR)
METHANE (CH4) (Methane)
METHANE-COMB (Combined CH4 for HD 2b/3 vehicles only)
METHANOL (CH3OH) (Methanol)
N2O (Nitrous Oxide)
N2O-COMB (Combined Nitrous Oxide for HD 2b/3 vehicles only)
SPITBACK (Spitback Hydrocarbon in grams)
DT-IWRR (Drive Trace Inertia Work Ratio Rating)
DT-ASCR (Drive Trace Absolute Speed Change Rating)
DT-EER (Drive Trace Energy Economy Rating)
LEAK-DIA - Effective Leak Diameter (inches)
LEAK-GAS CAP - Gas Cap Leakage (cc/min)

Allowed For Charge Depleting Test Procedures Only:
AMP-HRS (Integrated Amp-hours)
START-SOC (System Start State of Charge Watt-hours)
END-SOC (System End State of Charge Watt-hours)
ACT-DISTANCE (Actual Distance Driven (miles))
AS-VOLT (Average System Voltage)

| | | | CREE and Opt-CREE are not valid values here since DFs and Standards will not be submitted for them. | | | | LD-CFT-SI-BR019 LD-CFT-SI-BR021 LD-CFT-SI-BR029 LD-CFT-SI-BR023 LD-CFT-SI-IB003b |

| Light Duty | Confirmatory Test | | | Manufacturer | Front End | XML | |

	Light Duty	Confirmatory Test		Verify	Back End	Assigned	LD-CFT-SI-BR019
	Light Duty	Confirmatory Test		Manufactuer	Front End	XML	LD-CFT-SI-BR019
MFRA = Mfr. Assigned EPAA = EPA Assigned MFRD = Mfr. Determined AGED = Aged components installed In the emission data vehicle	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR019
	Light Duty	Confirmatory Test	Note- Evaporative DFs are only additive, not multiplicative.	Manufacturer	Front End	XML	LD-CFT-SI-BR019

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process
Carline Information																		
CL-0.5	**Process Code**	Select the desired process code for the current submission.	CarlineSubmission/ CarlineInformationDetails	InformationProcessCode	1		A(1)	Enumeration	1	1						N = New dataset C = Correction of existing Verify dataset	Light-Duty	Certification
CL-1	**Manufacturer Code**	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	CarlineSubmission/ CarlineInformationDetails	EPAManufacturerCode	1		A(3)	Fixed string	3	3	[A-Z0-9]{3}						Light Duty	Certification
CL-2	**Model Year**	Enter the applicable model year for this test group.	CarlineSubmission/ CarlineInformationDetails	ModelYear	1		N(4)	Integer						1957	2100		Light Duty	Certification
CL-3	**Division Code**	Enter the applicable division for this carline.	CarlineSubmission/ CarlineInformationDetails	ManufacturerDivisionCode	1		N(2)	Integer						1	99		Light Duty	Certification
CL-4	**Car Line Code**	Enter the applicable carline code (assigned by the manufacturer) for this carline.	CarlineSubmission/ CarlineInformationDetails	CarlineCode	1		N(3)	Integer						1	999		Light Duty	Certification
CL-5	**FE Label Carline Class Code**	Enter the applicable class code for this carline using EPA's FE Label classifications.	CarlineSubmission/ CarlineInformationDetails	CarlineClassCode	1		N(2)	Enumeration								1 = Two-Seaters 2 = Minicompact Cars 3 = Subcompact Cars 4 = Compact Cars 5 = Midsize Cars 6 = Large Cars 7 = Small Station Wagons 8 = Midsize Station Wagons 9 = Large Station Wagons 10 = Small Pickup Trucks 2WD 11 = Small Pickup Trucks 4WD 12 = Standard Pickup Trucks 2WD 13 = Standard Pickup Trucks 4WD 14 = Vans, Cargo Type 15 = Vans, Passenger Type 17 = Special Purpose Vehicle 2WD 18 = Special Purpose Vehicle 4WD 19 = Special Purpose Vehicle Cab Chassis 20 = Minivan 2WD 21 = Minivan 4WD 22 = SUV 2WD 23 = SUV 4WD 24 = Electric Vehicles 30 = Small SUV 2WD 31 = Small SUV 4WD 32 = Standard SUV 2WD 33 = Standard SUV 4WD	Light Duty	Certification

ID	Name	Description	XML Path	Element			Type						Precision	Scale	Min	Max	Values		
								Verify Light-Duty Data Requirements											
CL-6	Full Carline Name	Enter the full carline name for this carline.	CarlineSubmission/ CarlineInformationDetails	FullCarlineName	1		A(32)	Normalized string	1	32									Light Duty	Certification
CL-8	Domestic/Import Code	Select the applicable domestic/import code for this carline.	CarlineSubmission/ CarlineInformationDetails	DomesticImportCode	1		A(1)	Enumeration										D=Domestic I = Import	Light Duty	Certification
CL-9	Average Passenger Volume	Enter the average passenger volume for this carline (in cubic feet).	CarlineSubmission/ CarlineInformationDetails/ VehicleVolumeMeasureDetails	AveragePassengerVolumeMeasure	0		N(6,3)	Decimal						6	3	0	999.999		Light Duty	Certification
CL-10	Average Luggage Volume	Enter the average luggage volume (in cubic feet).	CarlineSubmission/ CarlineInformationDetails/ VehicleVolumeMeasureDetails	AverageLuggageVolumeMeasure	0		N(5,3)	Decimal						5	3	0	99.999		Light Duty	Certification
CL-11	2-Door Passenger volume	Enter the 2-door passenger volume (in cubic feet).	CarlineSubmission/ CarlineInformationDetails/ VehicleVolumeMeasureDetails	TwoDoorPassengerVolumeMeasure	0		N(3)	Integer								0	200		Light Duty	Certification
CL-12	2-Door Luggage volume	Enter the 2-door luggage volume (in cubic feet).	CarlineSubmission/ CarlineInformationDetails/ VehicleVolumeMeasureDetails	TwoDoorLuggageVolumeMeasure	0		N(2)	Integer								0	60		Light Duty	Certification
CL-13	4-Door Passenger volume	Enter the 4-door passenger volume (in cubic feet).	CarlineSubmission/ CarlineInformationDetails/ VehicleVolumeMeasureDetails	FourDoorPassengerVolumeMeasure	0		N(3)	Integer								0	200		Light Duty	Certification
CL-14	4-Door Luggage volume	Enter the 4-door luggage volume (in cubic feet).	CarlineSubmission/ CarlineInformationDetails/ VehicleVolumeMeasureDetails	FourDoorLuggageVolumeMeasure	0		N(2)	Integer								0	60		Light Duty	Certification
CL-15	Hatchback Passenger volume	Enter the hatchback passenger volume (in cubic feet).	CarlineSubmission/ CarlineInformationDetails/ VehicleVolumeMeasureDetails	HatchbackPassengerVolumeMeasure	0		N(3)	Integer								0	200		Light Duty	Certification
CL-16	Hatchback Luggage volume	Enter the hatchback luggage volume (in cubic feet).	CarlineSubmission/ CarlineInformationDetails/ VehicleVolumeMeasureDetails	HatchbackLuggagerVolumeMeasure	0		N(2)	Integer								0	60		Light Duty	Certification

									Verify Light-Duty Data Requirements									
CL-17	Sales Restriction Code	Select the applicable sales restriction code for this carline.	CarlineSubmission/ CarlineInformationDetails	SalesRestrictionCode	0		A(2)	Enumeration								TR=US Territories PO=US Postal Service	Light Duty	Certification

Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
	Manufacturer	Front End	XML	
	Manufacturer	Front End	XML	LD-CERT-CL-BR001 LD-CERT-CL-BR002a LD-CERT-CL-BR002b LD-CERT-CL-BR009 LD-CERT-CL-BR010 LD-CERT-CL-BR012
	Manufacturer	Front End	XML	LD-CERT-CL-BR002a LD-CERT-CL-BR002b LD-CERT-CL-BR004 LD-CERT-CL-BR012
	Manufacturer	Front End	XML	LD-CERT-CL-BR002a LD-CERT-CL-BR002b LD-CERT-CL-BR003 LD-CERT-CL-BR004 LD-CERT-CL-BR012
	Manufacturer	Front End	XML	LD-CERT-CL-BR002a LD-CERT-CL-BR002b LD-CERT-CL-BR004 LD-CERT-CL-BR011 LD-CERT-CL-BR012
	Manufacturer	Front End	XML	LD-CERT-CL-BR022 LD-CERT-CL-BR023 LD-CERT-CL-BR024 LD-CERT-CL-BR025 LD-CERT-CL-IB001 LD-FE-GL-BR137 LD-FE-GL-BR149

Manufacturer	Front End	XML	
Manufacturer	Front End	XML	
Manufacturer	Front End	XML	LD-CERT-CL-BR005 LD-CERT-CL-BR013 LD-CERT-CL-BR014 LD-CERT-CL-BR015 LD-CERT-CL-BR016 LD-CERT-CL-BR017 LD-CERT-CL-BR018 LD-CERT-CL-BR019 LD-CERT-CL-BR020
Manufacturer	Front End	XML	LD-CERT-CL-BR005 LD-CERT-CL-BR013 LD-CERT-CL-BR014 LD-CERT-CL-BR015 LD-CERT-CL-BR016 LD-CERT-CL-BR017 LD-CERT-CL-BR018 LD-CERT-CL-BR019 LD-CERT-CL-BR020
Manufacturer	Front End	XML	LD-CERT-CL-BR021
Manufacturer	Front End	XML	LD-CERT-CL-BR021
Manufacturer	Front End	XML	LD-CERT-CL-BR021
Manufacturer	Front End	XML	LD-CERT-CL-BR021
Manufacturer	Front End	XML	LD-CERT-CL-BR021 LD-CERT-CL-BR026
Manufacturer	Front End	XML	LD-CERT-CL-BR021 LD-CERT-CL-BR026

	Manufacturer	Front End	XML	

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EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry
Evaporative Family Information																	
EV-0.5	**Process Code**	Select the desired process code for the current submission.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	InformationProcess Code	1		A(1)	Enumeration	1	1						N = New dataset C = Correction of existing Verify dataset D = Delete existing Verify dataset R = Request Report for an existing Verify dataset	Light-Duty
EV-19	**Manufacturer Code**	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	EPAManufacturerC ode	1	Once per evaporative family.	A(3)	String	3	3	[A-Z0-9]{3}						Light Duty
EV-1	**Evap/Refueling Family Name**	Enter the applicable evaporative/refueling name for this dataset.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	EvaporativeRefuelin gFamilyName	1		A(12)	Fixed string	12	12	[A-HJ-NPR-TV-Y1-9]{1} [A-Z0-9]{4}[0-9]{4}[A-Z0-9] {3}						Light Duty
EV-1.5	**Model Year**	Enter the applicable model year for this evaporative family.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	ModelYear	1	Once per evaporative family.	N(4)	Year type (1970-2100)						1957	2100		Light Duty
EV-2	**Evaporative Summary Information (EVSI) Type**	Enter the applicable type for this set of certification information: New, Update for Correction, or Update for Running Change.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	SummaryTypeIdenti fier	1		A(1)	Enumeration								N= New, U= Update for correction R= Update for Running change	Light Duty
EV-3	**Integrated ORVR**	Is the ORVR system for this evaporative/refueling family integrated with the evaporative system?	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	IntegratedORVRIndi cator	1		A(1)	Enumeration								Y = Yes N = No	Light Duty
HYD-3.5	**Fuel(s)**	Enter all applicable fuels for this test vehicle configuration.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	FuelIdentifier	1	1..n per Evaporative Family	A(3)	Enumeration								G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity HYD - Hydraulic	Light-Duty
EV-3.6	**Multiple Fuel Storage- Separate or Together**	If multiple fuels are selected for Fuel(s), are the fuels stored separately or together?	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	MultipleFuelStorage MethodIdentifier	0	1 per test group	A(8)	Enumeration								S - Fuels Stored Separately T - Fuels Stored Together	Light-Duty
EV-6	**Bladder fuel tank?**	Are the fuel tanks for this evaporative/refueling family equipped with a bladder?	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/FuelTankDetails	BladderTankIndicat or	1		A(1)	Enumeration								Y = Yes N = No	Light Duty
EV-7	**Fuel tank Material**	Enter the applicable material for the fuel tank for this evaporative/refueling family. Choose 'Other' if both metal and plastic are used, or, some other material or composite is used.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/FuelTankDetails	FuelTankMaterialIde ntifier	1		A(2)	Enumeration								M = Metal P = Plastic OT = Other	Light Duty
EV-8	**Fuel Tank Material description**	Enter a description of the fuel tank.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/FuelTankDetails	FuelTankMaterialOt herText	0		A(100)	Normalized String	1	100							Light Duty

ID	Data Element Name	Description	XML Path	XML Element	Min	Occurrence	Type	Data Type	Min Len	Max Len	Pattern			Min Val	Max Val	Code Values	Vehicle Class
					Verify Light-Duty Data Requirements												
EV-9	Fill Pipe Seal Type	Enter the applicable type of fill pipe seal for this evaporative/refueling family.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/FuelTankDetails	FillPipeSealTypeIdentifier	1		A(1)	Enumeration								L = Liquid Seal M = Mechanical Seal	Light Duty
EV-10	Air Intake System Vapor Storage Device	Do vehicles in this evaporative/refueling family have an air intake system vapor storage device?	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/VaporStorageDetails	AirIntakeSystemDeviceIndicator	1		A(1)	Enumeration								Y = Yes N = No	Light Duty
EV-10.5	Air Intake System Vapor Storage Device Description	Describe the airtake system vaport storage device	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/VaporStorageDetails	AirIntakeSystemDeviceDescriptionText	0		A(100)	String	1	100							Light Duty
EV-11	Fuel System Vapor Storage Canister	Do vehicles in this evaporative/refueling family have a fuel system vapor storage canister?	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/VaporStorageDetails	VaporStorageCanisterIndicator	1		A(1)	Enumeration								Y = Yes N = No	Light Duty
EV-12	Other Vapor Storage	Enter a description of other vapor storage devices for this evaporative/refueling family.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/VaporStorageDetails	VaporStorageCanisterDescriptionText	0		A(30)	Normalized String	1	30							Light Duty
EV-13	Fuel System Vapor Storage Canister(s) Total Working Capacity	Enter the total working capacity (in grams) of all primary and secondary (bleed) canisters for this evaporative/refueling family.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/VaporStorageDetails	CanisterTotalWorkingCapacityMeasure	1		N(4)	Integer						0	9999		Light Duty
EV-14	Number of Primary Canisters	Enter the number of primary canisters for this evaporative/refueling family.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/VaporStorageDetails	PrimaryCanisterCount	1		N(1)	Integer						0	9		Light Duty
EV-15	Number of Bleed Canisters	Enter the number of bleed canisters for this evaporative/refueling family. Do not include bleed canisters that are internal to primary canisters.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/VaporStorageDetails	BleedCanisterCount	1		N(1)	Integer						0	9		Light Duty
EV-16	Bleed Canister Total Working Capacity	Enter the total working capacity of all bleed canisters (in grams).	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/VaporStorageDetails	BleedCanisterTotalWorkingCapacityMeasure	0		N(4)	Integer						0	9999		Light Duty
EV-17	Evap/refueling family system comment	Enter any additional coments about this evaporative/refueling family.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	ManufacturerCommentText	0		A(1000)	String	1	1000							Light Duty
EV-20	Leak Family Indicator	Do Leak Family requirements (e.g. Tier 3) apply to this Evaporative Family?	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	LeakFamilyIndicator	1	1 per evap family	A(1)	Enumeration	1	1						Y = Yes N = No	Light Duty
EV-23	Leak Family Identifier	Enter a unique 3-character string to identify a specific Leak Family within an Evaporative Family	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/LeakFamilyDetails	LeakFamilyIdentifier	0	1..n per Evaporative Family	A(3)	String	3	3	[A-Z0-9]{3}						Light Duty
EV-24	Leak Family Name	The Leak Family Name is the Verify system-generated Evaporative Family Name concatenated with the Leak Family Identifier (separated by a '-' (dash))	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/LeakFamilyDetails	LeakFamilyName	0	1..n per Evaporative Family	A(16)	String	16	16							Light Duty

EV-25	**Applicability of Leak Family Requirements**	Enter the applicable Certification Region for this Leak Family.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/LeakFamilyDetails	LeakFamilyRequire mentsApplicableRe gionCode	0	1 per Leak Family Identifier per Evap Family	A(2)	Enumeration								FC = 50 State CA = California Only FA = Federal Only	Light Duty
EV-26	**Leak Family Standard**	Enter the Leak Family Standard (effective leak diameter in inches).	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/LeakFamilyDetails	LeakFamilyStandar dMeasure	0	1 per Leak Family Identifier per Evap Family	N(4,3)	Number				3	3	0	0.999		Light Duty
EV-27	**Leak Family Description**	Enter a description for this Leak Family.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/LeakFamilyDetails	LeakFamilyDescripti onText	0	1 per Leak Family Identifier per Evap Family	A(1000)	String									Light Duty
EV-21	**Canister Bleed Test Indicator**	Do Canister Bleed Test requirements (e.g. Tier 3, LEV-III, etc…) apply to this Evaporative Family?	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	CanisterBleedTestIn dicator	1	1 per evap family	A(1)	Enumeration	1	1						Y = Yes N = No	Light Duty
EV-28	**Applicability of Evaporative Canister Bleed ~~Emission~~ Test**	Enter the applicable Certification Region for this Canister Bleed test.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/ CanisterBleedTestDetails	CanisterBleedTestA pplicableRegionCod e	0	1 per Evap Family	A(2)	Enumeration								FC = 50 State CA = California Only FA = Federal Only	Light Duty
EV-29	**Evaporative Canister Bleed Test Comments**	Enter Canister Bleed Test comments.	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details/ CanisterBleedTestDetails	CanisterBleedTestC ommentsText	0	1 per Evap Family	A(1000)	String									Light Duty
EV-22	**CARB Fuel Only (Rig) Test Indicator**	Do CARB Fuel Only (Rig) Test requirements (e.g. Tier 3, PZEV, LEV-III, etc…) apply to this Evaporative Family?	EvaporativeFamilySubmission / EvaporativeFamilyInformation Details	CARBFuelOnlyRigT estIndicator	1	1 per evap family	A(1)	Enumeration	1	1						Y = Yes N = No	Light Duty

EV-30	**Applicability of CARB Fuel Only (Rig) Test**	Enter the applicable Certification Region for this CARB Fuel Only (Rig) test.	EvaporativeFamilySubmission/ EvaporativeFamilyInformation Details/ CARBFuelOnlyRigTestDetails	CARBFuelOnlyRigTestApplicableRegionCode	0	1 per Evap Family	A(2)	Enumeration								FC = 50 State CA = California Only FA = Federal Only	Light Duty
EV-31	**CARB Fuel Only (Rig) Test Comments**	Enter the CARB Fuel Only (Rig) test comments.	EvaporativeFamilySubmission/ EvaporativeFamilyInformation Details/ CARBFuelOnlyRigTestDetails	CARBFuelOnlyRigTestCommentsText	0	1 per Evap Family	A(1000)	String									Light Duty
EV-32	**E10 Evaporative Test Measurement Method**	Enter E10 Measurement Method to be used for Running Loss and 2-Day/3-Day Hot Soak + Diurnal emissions only (e.g. for Tier 3/LEVIII tests). Method must agree with all Evaporative tests used for the tested Evaporative Family.	EvaporativeFamilySubmission/ EvaporativeFamilyInformation Details	E10EvaporativeTestMeasurementMethodIdentifier	0	1 per evap family	A(7)	Enumeration								ACTUAL = Actual Total Hydrocarbon Equivalent Measurement (with speciation) CALC = Calculated (1.08 x FID Total Hydrocarbons) FID-EPA = Actual FID w/o Speciation (EPA Only)	Light Duty

Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
Certification		Manufacturer	Front End	XML	
Certification		Verify	Front End	XML	LD-CERT-EV-BR002 LD-CERT-EV-BR009 LD-CERT-EV-BR011 LD-CERT-EV-BR012
Certification		Manufacturer	Front End	XML	LD-CERT-EV-BR001b LD-CERT-EV-BR002 LD-CERT-EV-BR003 LD-CERT-EV-BR005 LD-CERT-EV-BR013
Certification		Manufacturer	Front End	XML	LD-CERT-EV-BR001b LD-CERT-EV-BR005
Certification		Manufacturer	Front End	XML	
Certification		Manufacturer	Front End	XML	
Certification	The 'HYD' value is not accepted for this dataset.	Manufacturer	Front end	XML	LD-CERT-EV-BR014 LD-CERT-EV-IB001 VI-BR11
Certification		Manufacturer	Front end	XML	LD-CERT-EV-BR015
Certification		Manufacturer	Front End	XML	
Certification		Manufacturer	Front End	XML	
Certification		Manufacturer	Front End	XML	LD-CERT-EV-BR006

Certification		Manufacturer	Front End	XML	
Certification		Manufacturer	Front End	XML	
Certification		Manufacturer	Front End	XML	LD-CERT-EV-BR007
Certification		Manufacturer	Front End	XML	
Certification		Manufacturer	Front End	XML	
Certification		Manufacturer	Front End	XML	
Certification		Manufacturer	Front End	XML	
Certification		Manufacturer	Front End	XML	
Certification		Manufacturer	Front End	XML	LD-CERT-EV-BR008
Certification		Manufacturer	Front End	XML	
Certification	CSC: This value should be displayed in the Evaporative/Refueling Information section of the CSI.	Manufacturer	Front End	XML	
Certification	If Leak Family Indicator (EV-20) equals 'Y' (Yes) then Leak Family Identifier (EV-23) is required.	Manufacturer	Front End	XML	LD-CERT-EV-BR018
Certification	Create a Leak Family Name when Leak Family Indicator (EV-20) equals 'Y' (Yes). The Verify-created Leak Family Name should be displayed in the Evaporative/Refueling Information section of the CSI.	Verify	Back-End	Assigned	

Certification	CSC: This value should be displayed in the Evaporative/Refueling Information section of the CSI. If Leak Family Identifier (EV-23) exists then Applicability of Leak Family Requirements (EV-25) is required. - Not necessary - Covered by XML schema	Manufacturer	Front End	XML	
Certification	CSC: This value should be displayed in the Evaporative/Refueling Information section of the CSI. If Leak Family Identifier (EV-23) exists then Leak Family Standard (EV-26) is required. Not necessary - Covered by XML schema The maximum allowed value for Leak Family Standard (EV-26) must be less than or equal to 0.040.	Manufacturer	Front End	XML	LD-CERT-EV-BR019
Certification	CSC: This value should be displayed in the Evaporative/Refueling Information section of the CSI.	Manufacturer	Front End	XML	
Certification	CSC: This value should be displayed in the Evaporative/Refueling Information section of the CSI.	Manufacturer	Front End	XML	
Certification	CSC: This value should be displayed in the Evaporative/Refueling Information section of the CSI. If Canister Bleed Test Indicator (EV-21) equals 'Y' (Yes) then Applicability of Evaporative Canister Bleed Emission Test (EV-28) is required.	Manufacturer	Front End	XML	LD-CERT-EV-BR020
Certification	CSC: This value should be displayed in the Evaporative/Refueling Information section of the CSI.	Manufacturer	Front End	XML	
Certification	CSC: This value should be displayed in the Evaporative/Refueling Information section of the CSI.	Manufacturer	Front End	XML	

Certification	CSC: This value should be displayed in the Evaporative/Refueling Information section of the CSI. If CARB Fuel Only (Rig) Test Indicator (EV-22) equals 'Y' (Yes) then Applicability of CARB Fuel Only (Rig) Test (EV-30) is required.	Manufacturer	Front End	XML	LD-CERT-EV-BR021
Certification	CSC: This value should be displayed in the Evaporative/Refueling Information section of the CSI.	Manufacturer	Front End	XML	
Certification	(TI-24.5) NOTES: This field will also be used for an IUVP Test Info business rule for IT-38.5. CSC: This value (EV-32) should be displayed in the Evaporative/Refueling Information section of the CSI. Even though there could be multiple values, a new BR in TG will limit the value of all of them to be equal at CSI time.	Verify	Back-End	Pre-existing	

								Data Type	Min	Max		Total	Fractional	
EPA Data Element Number	**Long Name**	**Description**	**Parent's Name**	**XML Tag**	**Required**	**Multiplicity**	**Basic Data Type**	**Description**	**Length**	**Length**	**Pattern**	**Digits**	**Digits**	**Min Value**
Tier 3 Update (Release 15.0)														
Test Group Information														
TG-0.5	**Process Code**	Select the desired process code for the current submission.	CertificationDataSubmission/ CertificationInformationDetails	InformationProcessCode	1		A(1)	Enumeration	1	1				
TG-1	**Manufacturer Code**	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	CertificationDataSubmission/ CertificationInformationDetails	EPAManufacturerCode	1	Once per test group.	A(3)	String	3	3	[A-Z0-9]{3}			
TG-2	**Test Group**	Enter the applicable test group name for this set of certification information.	CertificationDataSubmission/ CertificationInformationDetails	TestGroupName	1	1..1	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}([\\.][A-Z0-9]{1,6})?			
TG-4	**CSI Type**	Enter the applicable type for this set of certification information: New, Update for Correction, or Update for Running Change.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails	CertificateTypeIdentifier	1	Once per test group.	A(1)	Enumeration						
TG-5	**Running Change Reference Number**	When the Update Indicator = "R", enter the running change number or document file name for the running change that was submitted to Verify's document system.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails	RunningChangeReferenceNumberText	0	Once per test group.	A(100)	Normalized string	1	100				
TG-6	**Model Year**	Enter the applicable model year for this test group.	CertificationDataSubmission/ CertificationInformationDetails	ModelYear	1	Once per test group.	N(4)	Year type (1970-2100)						1957
TG-7.1	**Drive Source**	Enter the applicable value for the drive source for this test group. Select 'E' for fuel cell electric vehicle.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ DriveSourceDetails	DriveSourceIdentifier	1	1..2 per Test Group	A(1)	Enumeration						
TG-7.2	**Hybrid Indicator**	Are the vehicles in this test group hybrid electric vehicles (HEVs) as defined in 40 CFR 86.1803-01?	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails	HybridVehicleIndicator	1	1 per Test Group	A(1)	Enumeration						
TG-7.3	**Fuel(s)**	Enter all applicable fuels for this test vehicle configuration.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ DriveSourceDetails/ FuelIdentifierDetails	FuelIdentifier	1	1..n per Drive Source per Test Group	A(3)	Enumeration						

TG-7.4	**Basic fuel metering system**	Enter the applicable fuel metering system type for this test group.	CertificationDataSubm	PrimaryFuelMetering SystemIdentifier	0	Once per selected Fuel (TG-7.3) per Drive Source (TG-7.1) per test group	A(4)	Enumeration						
TG-7.4.1	**Lean Burn Strategy Indicator**	Does the fuel metering system employ lean burn strategy (e.g. to significantly improve the fuel economy of the vehicle)?	CertificationDataSubm ission/ CertificationInformatio nDetails/ TestGroupIdentificatio nDetails/ DriveSourceDetails/ FuelIdentifierDetails	LeanBurnStrategyInd icator	0	Once per selected Fuel (TG-7.3) per Drive Source (TG-7.1) per test group	A(1)	Enumeration						
TG-7.5	**CREE Weighting Factor for Dual/Multiple Fuel Vehicles**	Enter the CREE weighting factor that has been approved by EPA under 600.510(k) for each fuel for dual/multiple fuel vehicles for this test group .	CertificationDataSubm ission/ CertificationInformatio nDetails/ TestGroupIdentificatio nDetails/ GreenhouseGasOffici alTestNumberDetails	WeightFactorValue	0	Once Per Test Group Fuel (TG-217.1) per test group	N(5,4)	Decimal				5	4	0.0000
TG-7.6	**Multiple Fuel Storage- Separate or Together**	If multiple fuels are selected for Fuel(s), are the fuels stored separately or together?	CertificationDataSubm ission/ CertificationInformatio nDetails/ TestGroupIdentificatio nDetails	MultipleFuelStorage MethodIdentifier	0	1 per test group	A(8)	Enumeration						
TG-7.7	**Multiple Fuel Combustion- Separate or Together**	If multiple fuels are selected for Fuel(s), are the fuels combusted separately or together?	CertificationDataSubm ission/ CertificationInformatio nDetails/ TestGroupIdentificatio nDetails	MultipleFuelCombust ionMethodIdentifier	0	1 per Test Group	A(8)	Enumeration						
TG-7.8	**Fuel Cell Indicator**	Are vehicles within this test group equipped with a Fuel Cell?	CertificationDataSubm ission/ CertificationInformatio nDetails/ TestGroupIdentificatio nDetails	FuelCellIndicator	0	1 per Test Group	A(1)	Enumeration						
TG-7.9	**Rechargeable Energy Storage System Indicator**	Are vehicles within this test group equipped with a rechargeable energy storage system?	CertificationDataSubm ission/ CertificationInformatio nDetails/ TestGroupIdentificatio nDetails	RechargeableEnergy StorageSystemIndica tor	0	1 per Test Group	A(1)	Enumeration						
TG-8.3	**Off-board Charge Capable Indicator**	Select "Yes" if vehicles within this test group are equipped with an electric motor that is capable of being charged off-board the vehicle, otherwise select "No".	CertificationDataSubm ission/ CertificationInformatio nDetails/ TestGroupIdentificatio nDetails	OffBoardChargeCap abilityIndicator	0	1 per Test Group	A(1)	Enumeration						
TG-9	**Federal Clean Fuel Vehicle**	Is this test group being certified to Federal Clean Fuel Vehicle emission standards?	CertificationDataSubm ission/ CertificationInformatio nDetails/ TestGroupIdentificatio nDetails/ FederalCleanFuelVehi cleDetails	CleanFuelIndicator	1	Once per test group.	A(1)	Enumeration						
TG-10	**Federal Clean Fuel Vehicle Standard**	Enter the applicable Clean Fuel Vehicle Standard for this test group.	CertificationDataSubm ission/ CertificationInformatio nDetails/ TestGroupIdentificatio nDetails/ FederalCleanFuelVehi cleDetails	CleanFuelStandardId entifier	0	Once per test group.	A(4)	Enumeration						

ID	Name	Description	XML Path	XML Element	Min	Occurrence	Format	Type	Max	Min	Pattern			
TG-11	**Federal Clean Fuel Vehicle ILEV**	Is this test group being certified to Federal Clean Fuel Vehicle ILEV emission standards?	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ FederalCleanFuelVehicleDetails	InherentlyLowEmissionsIndicator	0	Once per test group.	A(1)	Enumeration						
TG-11.5	**California Partial Zero Emissions Vehicle Indicator**	Is this test group being certified to Calfornia's partial zero emissions vehicle (PZEV) standards?	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails	CAPartialZeroEmissionsIndicator	0	Once per test group.	A(1)	Enumeration						
TG-12	**Durability Group Name**	Enter the applicable durability group name for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails	DurabilityGroupName	1	Once per test group.	A(12)	String	12	12	[A-Z0-9]{12}			
TG-13	**Durability Group Equivalency Factor**	Enter the applicable durability group equivalency factor.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails	DurabilityGroupEquivalencyFactorValue	1	Once per test group.	N(2,1)	Decimal				2	1	0.1
TG-14	**Certification Region Code**	Enter all applicable certification region codes for this test group. This was previously referred to as 'Sales Area' in CFEIS.	ission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ CertificationRegionDetails	CertificationRegionCode	1	1..2	A(2)	Enumeration						
TG-15	**Certification Projected Sales for each Certification Region Code**	Enter the projected sales for each applicable certification region code for this test group(ie- FA, CA+177).	ission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ CertificationRegionDetails	CertificationProjectedSalesCount	1	1..2	N(7)	Integer						0
TG-6.5	**HD GHG 2b/3 Indicator**	Enter Yes if this test group complies with the HD GHG 2b/3 regulations. Otherwise enter No.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails	HeavyDutyGreenhouseGas2bOr3Indicator	1	Once per test group.	A(1)	Enumeration						
TG-16	**EPA Vehicle Class**	Enter all applicable vehicle classes for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails	VehicleClassIdentifier	1	1..n	A(4)	Enumeration						
TG-19	**OBD Compliance Type**	Enter the applicable OBD Compliance Type for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ OnBoardDiagnosticDeviceDetails	ComplianceTypeIndicator	1	Once per test group.	A(1)	Enumeration						

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ID	Field Name	Description	XML Path	Element	Occurs	Frequency	Format	Type	Min	Max	Pattern	Default
TG-20	OBD Demonstration Vehicle Test Group	Enter the test group for the OBD demonstration vehicle.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ OnBoardDiagnosticDeviceDetails	DemonstractionVehicleTestGroupName	1	Once per test group.	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1} [A-Z0-9]{4,11}([\\.] [A-Z0-9]{1,6})?	
TG-21	Test Group OBD Compliance Level	Enter the applicable OBD Compliance Level for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ OnBoardDiagnosticDeviceDetails	ComplianceLevelIdentifier	1	Once per test group.	A(4)	Enumeration				
TG-22	Number of Test Group OBD Deficiencies	Enter the number of approved OBD deficiencies for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ OnBoardDiagnosticDeviceDetails	TestGroupDeficienciesCount	1	Once per test group.	N(2)	Integer				0
TG-23	OBD Deficiencies Comments	Provide a brief description of all approved deficiencies for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ OnBoardDiagnosticDeviceDetails	ManufacturerCommentText	0	Once per test group.	A(1000)	String	1	1000		
TG-24	Reduced Fee Test Group Indicator	Was a reduced fee payment submitted for this test group in accordance with CFR 85.2406?	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails	ReducedFeeIndicator	1	Once per test group.	A(1)	Enumeration				
TG-25	Test Group Comments	Enter any additional comments about this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails	ManufacturerCommentText	0	Once per test group.	A(1000)	String	1	1000		
	Hybrid/Combustion Engine Description (Not to be entered when Drive Source (TG-7) = 'E')					0..1						
TG-26	Hybrid Type	Enter the applicable type of Hybrid system for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails	HybridTypeIdentifier	0	Once per test group.	A(2)	Enumeration				
TG-27	Hybrid Type Description if Other	Enter a description of the hybrid system for this test group if "other" is selected for "Hybrid Type".	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails	HybridTypeOtherText	0	Once per test group.	A(100)	String	1	100		
TG-28	Engine type	Enter the applicable engine type for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails	EngineTypeIdentifier	0	Once per test group.	A(4)	Enumeration				

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ID	Field	Description	Path	Element		Frequency	Format	Type					
TG-29	**Engine Type Description**	Enter a description of the engine for this test group for gas turbine, rankine, sterling or "other" engine types.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails	EngineTypeOtherText	0	Once per test group.	A(1000)	String	1	1000			
TG-30	**Engine Block Arrangement**	Enter the applicable engine block arrangement for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails	EngineBlockArrangementIdentifier	0	Once per test group.	A(2)	Enumeration					
TG-31	**Engine Block Arrangement Description if Other**	Enter a description of the engine block arrangment for this test group if "other" is selected.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails	EngineBlockArrangementOtherText	0	Once per test group.	A(500)	String	1	500			
TG-32	**Number of Cylinders/Rotors**	Enter the number of cylinders or rotors for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails	CylindersOrRotorsCount	0	Once per test group.	N(2)	Integer					0
TG-32.5	**Camless Valvetrain Indicator**	Do the engines in this test group use something other than a camshaft to accuate the intake and exhaust valves?	CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails	CamlessValveTrainIndicator	0	Once per test group.	A(3)	Enumeration					
TG-32.6	**Oil Viscosity/Classification**	Enter oil Viscosity and classification recommended for use in summer (e.g.100deg F ambient temp) for engines in this test group (e.g. 0W20 GF 4, 5W20 GF3, etc)	HybridCombustionEngineDescriptionDetails	OilViscosityClassificationText	0	Once per test group.	A(25)	String	1	25			
	Engine Configuration Information		**HybridCombustionEngineDescription**			**1..n**							
TG-36	**Engine Configuration Number**	Assigned by Verify for each engine configuration created by the manufacturer.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	EngineConfigurationNumber	0	Repeats for each engine configuration (TG-36).	N(2)	Integer					1
TG-37	**Engine Rated Horsepower**	Enter the rated horsepower for this engine configuration. (In horsepower)	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	EngineRatedHorsepowerValue	0	Repeats for each engine configuration (TG-36).	N(4)	Integer					1
TG-38	**Engine Displacement (liters)**	Enter the engine displacement for this engine configuration. (In Liters)	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	EngineDisplacementValue	0	Repeats for each engine configuration (TG-36).	N(5,3)	Decimal			5	3	0.001
TG-39	**Cylinder Deactivation**	Does this engine configuration utilize cylinder deactivation technologies? This is sometimes referred to as variable displacement.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	CylinderDeactivationIndicator	0	Repeats for each engine configuration (TG-36).	A(1)	Enumeration					

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TG-40	Cylinder Deactivation Description	Enter a description of the cylinder deactivation technology utilized on this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	CylinderDeactivationDescriptionText	0	Repeats for each engine configuration (TG-36).	A(1000)	String	1	1000	
TG-41	Variable Valve Timing	Does this engine configuration utilize variable valve timing technology?	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	VariableValveTimingIndicator	0	Repeats for each engine configuration (TG-36).	A(1)	Enumeration			
TG-42	Variable Valve Timing System Description	Enter a description of the variable valve timing technology utilized on this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	VariableValveTimingDescriptionText	0	Repeats for each engine configuration (TG-36).	A(1000)	String	1	1000	
TG-43	Variable Valve Lift?	Is this engine configuration equipped with a variable valve lift mechanism?	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	VariableValveLiftIndicator	0	Repeats for each engine configuration (TG-36).	A(1)	Enumeration			
TG-44	Variable Valve Lift System Description	Enter a description of the variable valve lift mechanism utilized on this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	VariableValveLiftDescriptionText	0	Repeats for each engine configuration (TG-36).	A(1000)	String	1	1000	
TG-45	Number of Inlet Valves Per Cylinder	Enter the number of inlet valves per cylinder for this engine configuration. Enter 0 if not applicable.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	InletValvesPerCylinderCount	0	Repeats for each engine configuration (TG-36).	N(1)	Integer			0
TG-46	Number of exhaust Valves Per Cylinder	Enter the number of exhaust valves per cylinder for this engine configuration. Enter 0 if not applicable.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	ExhaustValvesPerCylinderCount	0	Repeats for each engine configuration (TG-36).	N(1)	Integer			0
TG-47	Air Aspiration Method	Enter the applicable air aspiration methods for this engine configuation.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	AirAspirationMethodIdentifier	0	Repeats for each engine configuration (TG-36).	A(2)	Enumeration			
TG-48	Number of Air Aspiration Devices	Enter the number of air aspiration devices for this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	AirAspirationDeviceCount	0	Repeats for each engine configuration (TG-36).	N(2)	Integer			0

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TG-49	**Air Aspiration Device Configuration**	Enter the air aspiration device configuration for this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	AirAspirationConfigurationIdentifier	0	Repeats for each engine configuration (TG-36).	A(2)	Enumeration						
TG-50	**Air Aspiration Method if Other**	Enter a description of the air aspiration method for this engine configuration if "other" is selected.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	AirAspirationMethodOtherText	0	Repeats for each engine configuration (TG-36).	A(30)	String	1	30				
TG-51	**Charge Air Cooler Type**	Enter the applicable charge air cooler type for this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	ChargeAirCoolerIdentifier	0	Repeats for each engine configuration (TG-36).	A(1)	Enumeration						
TG-52	**Engine Configuration Comments**	Enter any additional comments about this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	ManufacturerCommentText	0	Repeats for each engine configuration (TG-36).	A(1000)	String	1	1000				
	Exhaust Emission Control System													
	After Treatment Device Section		**ExhaustEmissionControlSystem**											
TG-53	**Total Number Of After Treatment Devices (ATDs)**	Enter the total number of after treatment devices for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsControlSystemDetails/ AftertreatmentDevicesDetails	AftertreatmentDeviceCount	0	Once per test group.	N(2)	Integer						0
TG-54	**ATD Comments**	Enter a description of the after treatment devices for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsControlSystemDetails/ AftertreatmentDevicesDetails	ManufacturerCommentText	0	Once per test group.	A(1000)	String	1	1000				
TG-55	**ATD Number**	A number assigned by Verify to each after treatment device.	NA	AftertreatmentDeviceNumber	0	Repeats the same number of times as the Number of ATDs (TG-53).	N(2)	Integer						1
TG-56	**ATD Type**	Enter the type of after treatment device for this ATD number.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsControlSystemDetails/ AftertreatmentDevicesDetails/ AftertreatmentDeviceDetails	AftertreatmentDeviceTypeIdentifier	0	Repeats the same number of times as the Number of ATDs (TG-53).	A(6)	Enumeration						
TG-57	**ATD Precious Metal Type**	Enter the applicable type(s) of precious metal(s) for this ATD number.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsControlSystemDetails/ AftertreatmentDevicesDetails/ AftertreatmentDeviceDetails	PreciousMetalTypeIdentifier	0	Repeats the same number of times as the Number of ATDs (TG-53).	A(2)	Enumeration						

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ID	Name	Description	XPath	Element		Condition	Repeats	Length	Type	Min	Max				Default
TG-58	**ATD Precious Metal Type if Other**	Enter a description of the type of precious metal for this ATD number if "other" is selected.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsControlSystemDetails/ AftertreatmentDevicesDetails/ AftertreatmentDeviceDetails	PreciousMetalOtherText		0	Repeats the same number of times as the Number of ATDs (TG-53).	A(50)	String	1	50				
TG-59	**Substrate Material**	Enter the applicable material of the substrate for this ATD number.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsControlSystemDetails/ AftertreatmentDevicesDetails/ AftertreatmentDeviceDetails	SubstrateMaterialIdentifier		0	Repeats the same number of times as the Number of ATDs (TG-53).	A(1)	Enumeration						
TG-60	**Substrate Construction**	Enter the applicable substrate construction for this ATD number.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsControlSystemDetails/ AftertreatmentDevicesDetails/ AftertreatmentDeviceDetails	SubstrateConstructionIdentifier		0	Repeats the same number of times as the Number of ATDs (TG-53).	A(1)	Enumeration						
TG-102	**Substrate Construction Other Description**	Enter a description of the type of precious metal for this ATD number if "other" is selected.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsControlSystemDetails/ AftertreatmentDevicesDetails/ AftertreatmentDeviceDetails	SubstrateConstructionOtherText		0	Repeats the same number of times as the Number of ATDs (TG-53).	A(50)	String	1	50				
	Sensor Information (Repeats for each Engine Configuration within a Test Group)		**ExhaustEmissionControlSystem**												
TG-61	**Number of Air/Fuel Sensors**	Enter the number of air/fuel sensors for this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails/ AirFuelSensorsDetails	AirFuelSensorCount		0	Repeats for each engine configuration (TG-36).	N(2)	Integer						0
TG-62	**Air/Fuel Sensor Number**	A number assigned by Verify to each Air/Fuel sensor.	NA			0	Repeats the same number of times as the Number of air/fuel sensors (TG-61).	N(2)	Integer						1
TG-63	**Air/Fuel Sensor Type**	Enter the applicable type of air/fuel sensor for this air/fuel sensor number.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails/ AirFuelSensorsDetails /AirFuelSensorDetails	AirFuelSensorTypeIdentifier		0	Repeats the same number of times as the Number of air/fuel sensors (TG-61).	A(5)	Enumeration						

TG-64	**Air/Fuel Sensor Type if Other**	Enter a description of the air/fuel sensor type if "other" selected for air/fuel sensor type.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails/ AirFuelSensorsDetails /AirFuelSensorDetails	AirFuelSensorTypeOtherText	0	Repeats the same number of times as the Number of air/fuel sensors (TG-61).	A(30)	String	1	30			
TG-65	**Number of Knock Sensors**	Enter the number of knock sensors for this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails/ AirFuelSensorsDetails	KnockSensorCount	0	Repeats for each engine configuration (TG-36).	N(2)	Integer					0
TG-66	**Sensor Comments**	Enter any additional description of the air/fuel sensors for this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails/ AirFuelSensorsDetails	ManufacturerCommentText	0	Repeats for each engine configuration (TG-36).	A(1000)	String	1	1000			
	Other Exhaust Emission Control		**ExhaustEmissionControlSystem**										
TG-67	**Exhaust Gas Recirculation**	Does this engine configuration utilize exhaust gas recirculation device?	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	ExhaustGasRecirculationIndicator	0	Repeats for each engine configuration (TG-36).	A(1)	Enumeration					
TG-68	**Cooled Exhaust Gas Recirculation**	Does this engine configuration utilize exhaust gas recirculation device?	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	CooledExhaustGasRecirculationIndicator	0	Repeats for each engine configuration (TG-36).	A(1)	Enumeration					
TG-69	**EGR Type**	Enter the type of exhaust gas recirculation device for this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	ExhaustGasRecirculationIdentifier	0	Repeats for each engine configuration (TG-36).	A(4)	Enumeration					
TG-70	**Exhaust Gas Recirculation Description if Other**	Enter a description of the exhaust gas recirculation device for this engine configuration if "other" is selected.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	ExhaustGasRecirculationOtherText	0	Repeats for each engine configuration (TG-36).	A(30)	String	1	30			
TG-71	**Closed Loop Air Injection System**	Does this engine configuration have a closed-loop air injection system?	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	ClosedLoopAirInjectionIndicator	0	Repeats for each engine configuration (TG-36).	A(1)	Enumeration					

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ID	Name	Description	XML Path	Element		Comments	Format	Type	Min	Max
TG-72	Air Injection Type	Enter the applicable type of air injection system for this engine configuration.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	AirInjectionIdentifier	0	Repeats for each engine configuration (TG-36).	A(4)	Enumeration		
TG-73	Air Injection if Other	Enter a description of the air injection system for this engine configuration if "other" is selected.	CertificationDataSubmission/ CertificationInformationDetails/ HybridCombustionEngineDescriptionDetails/ EngineConfigurationDetails	AirInjectionOtherText	0	Repeats for each engine configuration (TG-36).	A(30)	String	1	30
TG-74	Direct Ozone Reduction (DOR) Device	Enter the applicable type of direct ozone reduction (DOR) device for this test group. If equipped with a DOR, must obtain prior EPA approval before requesting a certificate for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsControlSystemDetails/ OtherExhaustEmissionsControlDeviceDetails	DirectOzoneReductionDeviceIdentifier	0	Once per test group.	A(2)	Enumeration		
TG-75	DOR Device if Other	Enter a description of the direct ozone reduction if other is selected.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsControlSystemDetails/ OtherExhaustEmissionsControlDeviceDetails	DirectOzoneReductionDeviceOtherText	0	Once per test group.	A(30)	String	1	30
TG-76	Emission Control Device Comments	Enter any additional comments about the emission control devices for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsControlSystemDetails/ OtherExhaustEmissionsControlDeviceDetails	ManufacturerCommentText	0	Once per test group.	A(1000)	String	1	1000
	Hybrid Electric Vehicle And Fuel Cell Information									
TG-77	Rechargeable Energy Storage System	Enter the applicable type of energy storage device for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails	RechargeableEnergyStorageDeviceIdentifier	0	Once per test group.	A(2)	Enumeration		
TG-78	Rechargeable Energy Storage Device if Other	Enter a description of the energy storage device for this test group if "other" selected.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails	RechargeableEnergyStorageDeviceOtherText	0	Once per test group.	A(30)	String	1	30
TG-79	Battery Type	Enter the applicable type of battery for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ BatterySpecificationsDetails	BatteryTypeIdentifier	0	Once per test group.	A(4)	Enumeration		
TG-80	Battery Type if Other	Enter a description of the battery type for this test group if "other" selected.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ BatterySpecificationsDetails	BatteryTypeOtherText	0	Once per test group.	A(30)	String	1	30

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ID	Field Name	Description	XML Path	XML Element		Frequency	Format	Type			
TG-81	Number of Battery Packs (not cells)	Enter the total number of batteries for this test group. Does not include starter batteries.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ BatterySpecificationsDetails	BatteryCount	0	Once per test group.	N(3)	Integer			0
TG-82	Total Voltage of Battery Pack(s)	Enter the total voltage of all battery pack(s) for this test group. Does not include starter batteries. (in Volts)	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ BatterySpecificationsDetails	BatteryTotalVoltageMeasure	0	Once per test group.	N(3)	Integer			1
TG-83	Battery Energy Capacity	Enter the battery energy capacity for this test group. Does not include starter batteries. (in Ah)	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ BatterySpecificationsDetails	BatteryEnergyCapacityMeasure	0	Once per test group.	N(6,2)	Decimal	6	2	0.01
TG-84	Battery Specific Energy	Enter the battery specific energy for this test group. Does not include starter batteries. (in Whr/kg)	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ BatterySpecificationsDetails	BatterySpecificEnergyMeasure	0	Once per test group.	N(5,1)	Decimal	5	1	0.1
TG-85	Battery Charger Type	Enter the applicable type of battery charger type for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ BatterySpecificationsDetails	BatteryChargerTypeIdentifier	0	Once per test group.	A(3)	Enumeration			
TG-86	Number of Capacitors	Enter the number of capacitors for this test group.	CertificationDataSubmission/ CertificationDataDetails/ HybridElectricVehicleFuelCellDetails/ CapacitorSpecificationsDetails	CapacitorCount	0	Once per test group.	N(2)	Integer			0
TG-87	Capacitor Rating In Farads	Enter the rating of each capacitor number (in farads).	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ CapacitorSpecificationsDetails	CapacitorRatingValue	0	1..n (Repeats for the total number of capacitors)	N(4,2)	Decimal	4	2	0.01
TG-88	Capacitor Comments	Enter any additional comments about the capacitor(s) for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ CapacitorSpecificationsDetails	CapacitorCommentText	0	Once per test group.	A(100)	String	1	100	
TG-89	Hydraulic System Description	Enter a description of the hydraulic system for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails	HydraulicSystemDescriptionText	0	Once per test group.	A(1000)	String	1	1000	
TG-90	Regenerative Braking Type	Enter the applicable type of regenerative braking technology utilized on this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ RegenerativeBrakingDetails	BrakingTypeIdentifier	0	Once per test group.	A(3)	Enumeration			

Verify Light-Duty Data Requirements

TG-91	**Regenerative Braking Type if "Other"**	Enter a description of the type of regenerative braking technology utilized on this test group if "other" is seleced.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ RegenerativeBrakingDetails	BrakingTypeOtherText	0	Once per test group.	A(1000)	String					
TG-92	**Regenerative Braking Source**	Enter the applicable source of regenerative braking for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ RegenerativeBrakingDetails	BrakingSourceIdentifier	0	Once per test group.	A(1)	Enumeration					
TG-93	**Driver Controlled Regenerative Braking**	Does this test group have driver-controlled regenerative braking?	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ RegenerativeBrakingDetails	DriverControlledBrakingIndicator	0	Once per test group.	A(1)	Enumeration					
TG-94	**Number of Drive Motor/Generator(s)**	Enter the number of drive motor/generator(s) for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ DriveMotorGeneratorDetails	MotorGeneratorCount	0	Once per test group.	N(1)	Integer					0
TG-95	**Motor/Generator Type**	Enter the applicable type of motor/generator for this motor/generator.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ DriveMotorGeneratorDetails/ MotorGeneratorDetail	GeneratorTypeIdentifier	0	1..n (Repeats for the total number of drive motor/generators)	A(4)	Enumeration					
TG-96	**Motor/Generator Type if Other**	Enter a description of the type of motor/generator for this motor/generator if other is selected.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ DriveMotorGeneratorDetails/ MotorGeneratorDetail	GeneratorTypeOtherText	0	1..n (Repeats for the total number of drive motor/generators)	A(30)	String	1	30			
TG-97	**Rated Motor/Generator Power**	Enter the rated power of the motor/generator for this motor/generator. (in kWatt)	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails/ DriveMotorGeneratorDetails/ MotorGeneratorDetails	GeneratorRatedPowerValue	0	1..n (Repeats for the total number of drive motor/generators)	N(3)	Integer					1
TG-98	**Fuel Cell Description**	Enter a description of the fuel cell for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails	FuelCellDescriptionText	0	Once per test group.	A(1000)	String	1	1000			
TG-99	**Fuel Cell On-Board H2 Storage Capacity**	Enter the on-board hydrogen storage capacity for this test group. (in kg)	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails	FuelCellOnboardHydrogenStorageMeasure	0	Once per test group.	N(5,2)	Decimal			5	2	0.01
TG-100	**Usable H2 Fill Capacity**	Enter the usable hydrogen fill capacity for this test group. (in kg)	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails	UsableHydrogenFillCapacityMeasure	0	Once per test group.	N(5,2)	Decimal			5	2	0.01

					Verify Light-Duty Data Requirements										
TG-101	**HEV EV Comments**	Enter any additional comments for this electric vehicle or hybrid-electric vehicle.	CertificationDataSubmission/ CertificationInformationDetails/ HybridElectricVehicleFuelCellDetails	ManufacturerCommentText	0	Once per test group.	A(1000)	String	1	1000					
	Exhaust Emissions Standards and Cert Levels entered for each Certification Region														
TG-200	**Certification Region Code**	Select the applicable certification region codes for this exhaust standard.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	CertificationRegionCode	1	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(2)	Enumeration							
TG-200.5	**Certification/In-Use Code**	Select the applicable certification/in-use code for this exhaust standard.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	CertificationInUseCode	1	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(2)	Enumeration							
TG-205	**Vehicle Class**	Select the applicable vehicle class for this exhaust standard.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	VehicleClassIdentifier	1	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(2)	Enumeration							

TG-201	Exhaust Emission Standard Level	Select the applicable standard level for this exhaust standard.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	ExhaustEmissionsStandardLevelIdentifier	1	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(10)	Enumeration			([0-9]{1,3} [\.][0-9] {1,4})|([\.][0-9]{1,4})|([0-9]{1,3}[\.]?)		
TG-201	Exhaust Emission Standard Level (cont.)												

TG-201	**Exhaust Emission Standard Level (cont.)**															
TG-204	**Fuel**	Select the applicable fuel for this exhaust standard.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	FuelIdentifier	1	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(3)	Enumeration								
TG-204.5	**Test Procedure**	Enter the applicable test procedure for the applicable exhaust emission standard.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	TestProcedureIdentifier	1	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	N(2)	Enumeration								

TG-210	**Useful Life Mileage**	Select the applicable useful life mileage for this exhaust standard.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	UsefulLifeMileageIdentifier	1	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	N(3)	Enumeration							
TG-209	**Test Result/Emission Name**	Select the applicable test result name for this exhaust standard.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	TestResultIdentifier	1	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(16)	Enumeration							
TG-211	**Emission Standard Value**	This is a system-generated numeric field based on converting the text value entered by the manufacturer for "Emission Standard Value (Text)" (TG-212) .	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails	EmissionStandardValue	1	1..1 for each unique set of exhaust standard/DF info.	N(7,4)	Decimal					7	4	0
TG-212	**Emission Standard Value (Text)**	Enter the applicable numeric value for this exhaust standard name including any additional digits that are necessary for proper rounding. For Test Result/Emission Names equal to "CREE" or "OPT-CREE", enter a value of "999.9999" for the Emission Standard Value.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	ExhaustEmissionsStandardValueText	1	1..1 for each unique set of exhaust standard/DF info.	A(8)	Numeric string							
TG-208	**Exhaust Deterioration Factor Type**	Select the applicable deterioration factor type for this exhaust standard name.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	DeteriorationFactorTypeIdentifier	1	1..1 for each unique set of exhaust standard/DF info.	A(4)	Enumeration							
TG-206	**Using NMOG/NMHC Ratio?**	If this is an NMOG standard, is the NMOG/NMHC ratio being used?	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	NMOGToNMHCRatioIndicator	0	1..1 for each unique set of exhaust standard/DF info.	A(1)	Enumeration							

Verify Light-Duty Data Requirements

ID	Field Name	Description	XML Path	Element		Cardinality	Format	Type	Min	Max	Pattern		Default
TG-207	Ratio of NMOG/NMHC	If applicable, enter the value for the NMOG/NMHC ratio for this exhaust standard name.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	NMOGToNMHCRatioValue	0	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal				3	2	0.00
TG-214	Additive DF	If applicable, enter the additive deterioriation factor (DF) value for this exhaust standard name.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	AdditiveDeteriorationFactorValue	0	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal				7	6	0
TG-215	Multiplicative DF	If applicable, enter the multiplicative deterioriation factor (DF) value for this exhaust standard name.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	MultiplicativeDeteriorationFactorValue	0	1..1 for each unique set of exhaust standard/DF info.	N(4,3)	Decimal				4	3	1
TG-215.5	Upward Diesel Adjustment Factor	If applicable, enter the upward diesel adjustment factor value for this exhaust standard name.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	UpwardDieselAdjustmentFactor	0	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal				7	6	-9.999999
TG-215.6	Downward Diesel Adjustment Factor	If applicable, enter the downward diesel adjustment factor value for this exhaust standard name.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	DownwardDieselAdjustmentFactor	0	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal				7	6	-9.999999
TG-216	Reactivity Factor (RAF)	If applicable, enter the reactivity factor for this exhaust standard name.	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustEmissionsStandardDetails	ReactivityFactorValue	0	1..1 for each unique set of exhaust standard/DF info.	N(5)	Integer						0
TG-220	Exhaust/Evaporative Emission Standard Comments	Enter any additional comments for the exhaust or evaporative standards for this test group.	CertificationDataSubmission/ CertificationInformationDetails	EmissionStandardCommentText	0	1 per test group.	A(1000)	String	1	1000				
	Evaporative and Refueling Emission Standards and Cert Levels Entered For Each Certified Region Code												
TG-3	Evaporative/Refueling Family Name	Enter all applicable evaporative/refueling family names for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails	EvaporativeRefuelingFamilyName	0	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4}[0-9]{4}[A-Z0-9]{3}		
TG-221	Certification Region Code	Select the applicable certification region codes for this evaporative standard.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ EvaporativeEmissionsStandardDetails	CertificationRegionCode	0	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(2)	Enumeration						

TG-221.5	**Certification/In-Use Code**	Select the applicable certification/in-use code for this evaporative standard.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ EvaporativeEmissions StandardDetails	CertificationInUseCode	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	0	0..n	A(2)	Enumeration							
TG-224	**Evaporative/Refueling Standard Level**	Select the applicable standard level for this evaporative standard.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ EvaporativeEmissions StandardDetails	EvaporativeEmissionsStandardLevelIdentifier	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	0	0..n	A(4)	Enumeration							
TG-223	**Fuel**	Select the applicable fuel for this evaporative standard.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ EvaporativeEmissions StandardDetails	FuelIdentifier	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	0	0..n	A(3)	Enumeration							
TG-223.5	**Test Procedure**	Enter the applicable test procedure for this evaporative emission standard.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ EvaporativeEmissions StandardDetails	TestProcedureIdentifier	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	0	0..n	N(2)	Enumeration							

ID	Field Name	Description	XML Path	Element Name		Cardinality	Length	Type			Pattern			
TG-223.6	Useful Life Mileage	Select the applicable useful life mileage for this evaporative standard.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ EvaporativeEmissionsStandardDetails	UsefulLifeMileageIdentifier	0	0..n	N(3)	Enumeration			Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.			
TG-225	Test Result/Emission Name	Select the applicable emission name for this evaporative standard.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ EvaporativeEmissionsStandardDetails	TestResultIdentifier	0	0..n	A(16)	Enumeration			Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.			
TG-226	Evaporative Emission Standard Value	This is a system-generated numeric field based on converting the text value entered by the manufacturer for "Evaporative Emission Standard Value (Text)" (TG-226.5) .	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails	EvaporativeEmissionsStandardValue	0	1..1 for each unique set of evap standard/DF info.	N(7,4)	Decimal			([0-9]{1,3} [\.][0-9]{1,4})|([\.][0-9]{1,4})|([0-9]{1,3}[\.]?)	7	4	0.0000
TG-226.5	Evaporative Emission Standard Value (Text)	Enter the applicable numeric value for this evaporative standard name including any additional digits that are necessary for proper rounding.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ EvaporativeEmissionsStandardDetails	EvaporativeEmissionsStandardValueText	0	1..1 for each unique set of evap standard/DF info.	A(8)	String						
TG-222	Evaporative Deterioration Factor Type	Select the applicable deterioration factor type for this evaporative standard.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ EvaporativeEmissionsStandardDetails	DeteriorationFactorTypeIdentifier	0	1..1 for each unique set of evap standard/DF info.	A(4)	Enumeration						
TG-227	Additive DF	Enter the additive deterioriation factor (DF) value for this evaporative standard name.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ EvaporativeEmissionsStandardDetails	AdditiveDeteriorationFactorValue	0	1..1 for each unique set of evap standard/DF info.	N(7,6)	Decimal				7	6	0

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	All Certification Exhaust and Evaporative Tests															
TG-202	**Evaporative Test Number**	Enter all applicable **evaporative** test numbers for this test group/evaporative family combination. This is a unique number assigned by Verify to identify this set of test info and results. Character 1 is the Model Year the test was originally run for, Characters 2 - 5 are the Manufacturer code followed by a dash, characters 6 -12 are the sequential 7-digit test number. For the sequential test number, if it begins with 9 its an EPA test, any other number is a manufacturer test. A sample test number is "9MFR-9012345".	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ EvaporativeTestNumberDetails	TestNumberIdentifier	1	1..n	A(12)	String	12	12					
TG-202.5	**Exhaust Test Number**	Enter all applicable exhaust test numbers for this test group. This is a unique number assigned by Verify to identify this set of test info and results. Character 1 is the Model Year the test was originally run for, Characters 2 - 5 are the Manufacturer code followed by a dash, characters 6 -12 are the sequential 7-digit test number. For the sequential test number, if it begins with 9 its an EPA test, any other number is a manufacturer test. A sample test number is "9MFR-9012345".	CertificationDataSubmission/ CertificationInformationDetails/ ExhaustTestNumberDetails	TestNumberIdentifier	1	1..n	A(12)	String	12	12					
TG-216.7	**GHG Exempt Status**	Select the applicable greenhouse gas exemption status for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails	GreenhouseGasExemptStatusIdentifier	0	1 for each test group	A(3)	Enumeration							
TG-216.8	**SFTP Federal Compliance Identifier**	Select whether this Test Group is SFTP composite compliant for Tier 2 or Tier 3 requirements.	CertificationDataSubmission/ CertificationInformationDetails/ SupplementalFederalTestProcedureCalculationDetails	FederalComplianceIdentifier	1	1 for each test group	A(1)	Enumeration							
TG-216.9	**SFTP Tier 2 Composite CO Option**	Select whether the SFTP Composite CO option applies to this Test Group for Tier 2 requirements.	CertificationDataSubmission/ CertificationInformationDetails/ SupplementalFederalTestProcedureCalculationDetails	Tier2CompositeCOOptionIndicator	0	1 for each test group	A(1)	Enumeration							
TG-261	**SFTP LEV-III Compliance Indicator**	Select whether this Test Group is SFTP composite compliant for LEV-III.	CertificationDataSubmission/ CertificationInformationDetails/ SupplementalFederalTestProcedureCalculationDetails	LEVIIIComplianceIndicator	1	1 for each test group	A(1)	Enumeration							

TG-217	**Official FTP test number**	Enter the Test Number of the official FTP test for this test group. If SFTP Tier 3 Compliance Identifier (TG-260) is "TIER3," then this Official FTP test number (TG-217) will be used to calculate the Tier 3 SFTP NMOG + NOx-COMP test results (TG-255) and the Tier 2/Tier 3 CO-COMP test results (TG-219.6).	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ GreenhouseGasOfficialTestNumberDetails	FTPTestNumber	1	Once per Test Group Fuel (TG-217.1) per test group	A(12)	String	12	12			
TG-217.1	**Test Group Fuel**	Select the applicable fuels for each test group	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ GreenhouseGasOfficialTestNumberDetails	FuelIdentifier				Enumeration					
TG-217.2	**Test Group Fuel - Charge-Depleting**	Select the applicable charge-depleting test fuels for each test group. For PHEVs 'EL' (Electricity) should not be entered; only enter the fuel used while the combustion engine is running.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ ChargeDepletingOfficialTestNumberDetails	FuelIdentifier				Enumeration					
TG-218	**Official US06 Test Number**	Enter the Test Number of the official US06 test for this test group. This US06 test must have split bag fuel economy results. For Heavy Duty Class 3 vehicles enter the Hot 1435 LA92' test number (Test Procedure Code = '16'). For Heavy Duty Class 2b vehicles enter the US06 Bag 2 Only test number (Test Procedure Code = '96'), if applicable. If SFTP Tier 3 Compliance Identifier (TG-260) is "TIER3," then this Official US06 test number (TG-218) will be used to calculate the Tier 3 SFTP NMOG + NOx-COMP test results (TG-255) and the Tier 2/Tier 3 CO-COMP test results (TG-219.6).	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ GreenhouseGasOfficialTestNumberDetails	US06TestNumber	0	Once per Test Group Fuel (TG-217.1) per test group	A(12)	String	12	12			

TG-219	**Official SC03 Test Number**	Enter the Test Number of the official SC03 test for this test group. If SFTP Tier 3 Compliance Identifier (TG-260) is "TIER3," then this Official SC03 test number (TG-218) will be used to calculate the Tier 3 SFTP NMOG + NOx-COMP test results (TG-255) and the Tier 2/Tier 3 CO-COMP test results (TG-219.6).	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ GreenhouseGasOfficialTestNumberDetails	SC03TestNumber	0	Once per Test Group Fuel (TG-217.1) per test group	A(12)	String	12	12			
TG-219.1	**Official Cold CO Test Number**	Enter the Test Number of the official Cold CO test for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ GreenhouseGasOfficialTestNumberDetails	ColdCOTestNumber Text	0	Once per Test Group Fuel (TG-217.1) per test group	A(12)	String	12	12			
TG-219.2	**Official Highway Test Number**	Enter the Test Number of the official Highway test for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ GreenhouseGasOfficialTestNumberDetails	HighwayTestNumber Text	0	Once per Test Group Fuel (TG-217.1) per test group	A(12)	String	12	12			
TG-262	**Test Group Fuel - SFTP LEV-III**	Select the applicable fuels for this Test Group for LEV-III SFTP official tests	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ SupplementalFederalTestProcedureLEVIII OfficialTestNumberDetails	FuelIdentifier	0	1..n per test group		Enumeration					
TG-263	**Official SFTP LEV-III FTP Test Number**	Enter the Test Number of the official SFTP LEV-III FTP test number for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ SupplementalFederalTestProcedureLEVIII OfficialTestNumberDetails	FTPTestNumber	0	Once per Test Group Fuel SFTP LEV-III (TG-262) per test group	A(12)	String	12	12			
TG-264	**Official SFTP LEV-III US06 Test Number**	Enter the Test Number of the official SFTP LEV-III US06 test for this test group. This US06 test must have split bag fuel economy results. For Heavy Duty Class 3 vehicles enter the Hot 1435 LA92' test number (Test Procedure Code = '16'). For Heavy Duty Class 2b vehicles enter the US06 Bag 2 Only test number (Test Procedure Code = '96'), if applicable.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ SupplementalFederalTestProcedureLEVIII OfficialTestNumberDetails	US06TestNumber	0	Once per Test Group Fuel SFTP LEV-III (TG-262) per test group	A(12)	String	12	12			

TG-265	**Official SFTP LEV-III SC03 Test Number**	Enter the Test Number of the official SFTP LEV-III SC03 test for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ SupplementalFederalTestProcedureLEVIII OfficialTestNumberDetails	SC03TestNumber	0	Once per Test Group Fuel SFTP LEV-III (TG-262) per test group	A(12)	String	12	12			
TG-219.3	**Charge Depleting Official UDDS Test Number**	Enter the Test Number of the official UDDS test for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ ChargeDepletingOfficialTestNumberDetails	UDDSTestNumber	0	Once per Test Group Fuel (TG-217.1) per test group	A(12)	String	12	12			
TG-219.3.1	**EPA City Litmus Value**	The EPA Calculated City litmus value based on the vehicle specific 5-Cycle label equation(s).	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails/ EPAGeneratedGreenhouseGasDetails	CityLitmusValue	0	Once per Test Group Fuel (TG-217.1) per test group	N(4,1)	Decimal			4	1	0.0
TG-219.3.2	**EPA City Litmus Threshold**	The EPA Calculated City Litmus Threshold based on the derived 5-Cycle city label equation.	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails/ EPAGeneratedGreenhouseGasDetails	CityLitmusThresholdValue	0	Once per Test Group Fuel (TG-217.1) per test group	N(4,1)	Decimal			4	1	0.0
TG-219.4	**Official Charge Depleting Highway Test Number**	Enter the Test Number of the official Highway test for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ TestGroupIdentificationDetails/ ChargeDepletingOfficialTestNumberDetails	HighwayTestNumberText	0	Once per Test Group Fuel (TG-217.1) per test group	A(12)	String	12	12			

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TG-219.4.1	**EPA Highway Litmus Value**	The EPA Calculated Highway Litmus Value based on the vehicle specific 5-Cycle highway label equation(s).	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails/ EPAGeneratedGreenhouseGasDetails	HighwayLitmusValue	0	Once per Test Group Fuel (TG-217.1) per test group	N(4,1)	Decimal				4	1	0.0
TG-219.4.2	**EPA Highway Litmus Threshold**	The EPA Calculated Highway Litmus Threshold based on the derived 5-Cycle highway label equation.	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails/ EPAGeneratedGreenhouseGasDetails	HighwayLitmusThresholdValue	0	Once per Test Group Fuel (TG-217.1) per test group	N(4,1)	Decimal				4	1	0.0
TG-219.5	**HC-NM+NOX-COMP - Tier 2**	Verify will calculate and store the Tier 2 HC-NM+NOX Composite value based on the FTP, US06, and SC03 test numbers entered for SFTP.	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails	CompositeHCNMAndNOXValue	0	1 ..1	N(8,4)	Decimal				8	4	0
TG-219.6	**CO-COMP - Tier 2/Tier 3**	Verify will calculate and store the Tier 2 /Tier 3 CO Composite value based on the FTP, US06, and SC03 test numbers entered for SFTP.	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails	CompositeCOValue	0	~~1..1~~ **Once per Test Group Fuel (TG-217.1) per test group**	N(8,4)	Decimal				8	4	0
TG-219.7	**PM-COMP - Tier 2**	Verify will calculate and store the Tier 2 PM Composite value based on the FTP, US06, and SC03 test numbers entered for SFTP.	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails	CompositePMValue	0	1 ..1	N(8,4)	Decimal				8	4	0
TG-255	**NMOG+NOX-COMP - Tier 3**	Verify will calculate and store the Tier 3 NMOG+NOX Composite value based on the FTP, US06, and SC03 test numbers entered for SFTP.	N/A	N/A	0	~~1..1~~ **Once per Test Group Fuel (TG-217.1) per test group**	N(8,4)	Decimal				8	4	0
TG-256	**NMOG+NOX-COMP - LEV-III**	Verify will calculate and store the LEV-III NMOG+NOX Composite value based on the FTP, US06, and SC03 test numbers entered for SFTP.	N/A	N/A	0	~~1..1~~ **Once per Test Group Fuel (TG-217.1) per test group**	N(8,4)	Decimal				8	4	0
TG-257	**CO-COMP - LEV-III**	Verify will calculate and store the LEV-III CO Composite value based on the FTP, US06, and SC03 test numbers entered for SFTP.	N/A	N/A	0	~~1..1~~ **Once per Test Group Fuel (TG-217.1) per test group**	N(8,4)	Decimal				8	4	0

Exhaust Emission Cert Level Information

Verify Light-Duty Data Requirements

ID	Name	Description	XPath	Element		Cardinality	Format	Data Type						
TG-212.9	Rounded Emission Result	Verify will round the unrounded test results for each CSI test number/emission name combination to the same number of digits as the corresponding emission standard plus one digit. Each rounded result will then have the DF applied to calculate the official certification levels.	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails/ EPAGeneratedExhaustEmissionCertificationLevelDetails	RoundedEmissionResultValue	1	1 for each provided unrounded emission result (via test number) for which a corresponding emission standard is provided on the CSI.	N(11,7)	Decimal				11	7	0
TG-213	Certification Level	Verify-calculated certification levels for all applicable Test Results/Emission Names.	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails/ EPAGeneratedExhaustEmissionCertificationLevelDetails	CalculatedCertificationLevelValue	1	1 for each calculated Rounded Emission Result	N(8,4)	Decimal				8	4	0
TG-213.5	Criteria Pollutant Pass/Fail Indicator	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Pass/Fail Indicator to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail".	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails/ EPAGeneratedExhaustEmissionCertificationLevelDetails	CertificationPassFailIndicator	1	1 for each calculated Cert Level;	A(4)	Enumeration						

Evap Emission Cert Level Information

ID	Name	Description	XPath	Element		Cardinality	Format	Data Type						
TG-228	Rounded Emission Result	Verify will round the unrounded test results for each CSI test number/emission name combination to the same number of digits as the corresponding emission standard plus one digit. Each rounded result will then have the DF applied to calculate the official certification levels.	ver:CertificationDataSubmission/ ver:CertificationInformationDetails/ ver:EPAGeneratedCertificationDetails/ ver:EPAGeneratedEvaporativeEmissionCertificationLevelDetails	RoundedEmissionResultValue	1	1 for each provided unrounded emission result (via test number) for which a corresponding emission standard is provided on the CSI.	N(11,7)	Decimal				11	7	0
TG-229	Cert Level	Verify will calculate cert levels by applying the DF to each rounded emission result.	ver:CertificationDataSubmission/ ver:CertificationInformationDetails/ ver:EPAGeneratedCertificationDetails/ ver:EPAGeneratedEvaporativeEmissionCertificationLevelDetails	CalculatedCertificationLevelValue	1	1 for each calculated Rounded Emission Result	N(8,4)	Decimal				8	4	0
TG-230	Pass/Fail Indicator	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Pass/Fail Indicator to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail".	ver:CertificationDataSubmission/ ver:CertificationInformationDetails/ ver:EPAGeneratedCertificationDetails/ ver:EPAGeneratedEvaporativeEmissionCertificationLevelDetails	CertificationPassFailIndicator	1	1 for each calculated Cert Level	A(4)	Enumeration						

Test Procedure Reference Table- This will be used to make sure each CSI (test group/evap family combination) includes at least one test number for each required test cateogry.

TG-203	**Test Category**	This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories.	CertificationDataSubmission/ CertificationInformationDetails/ EPAGeneratedCertificationDetails	TestCategoryIdentifier	1	1 per test procedure	A(6)	Enumeration						
	Certified Models													
TG-300	**Carline Manufacturer code**	Enter all applicable carline manufacturer codes that will be certified for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ CertifiedModelsDetails	EPAManufacturerCode	1	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(3)	Fixed string			[A-Z0-9]{3}		
TG-301	**Division code**	Enter the division code for each carline for this test group. Division is also known as Make.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ CertifiedModelsDetails	ManufacturerDivisionCode	1	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	N(2)	Integer					0
TG-302	**Carline code**	Enter all applicable carline codes for this test group.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ CertifiedModelsDetails	CarlineCode	1	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	N(3)	Integer					0
TG-305	**Certification Region Code**	Select all applicable certification region codes for each entered carline code.	CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ CertifiedModelsDetails	CertificationRegionCode	1	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(2)	Enumeration					

			CertificationDataSubmission/ CertificationInformationDetails/ CertificationEvaporativeInformationDetails/ CertifiedModelsDetails									
TG-307	**Transmission Type**	Enter the applicable transmission type for this model.	CertificationDataSubmission/ CertificationInformatio nDetails/ CertificationEvaporativ eInformationDetails/ CertifiedModelsDetails	LightDutyTransmissi onTypeIdentifier	1	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(3)	Enumeration				
TG-308	**Transmission Type if Other**	Enter a description of the transmission type if "other" selected.	CertificationDataSubmission/ CertificationInformatio nDetails/ CertificationEvaporativ eInformationDetails/ CertifiedModelsDetails	LightDutyTransmissi onTypeOtherText	0	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(30)	Normalized string	1	30		
TG-309	**Transmission Lockup**	Does this model type have a transmission torque convertor lock-up mechanism?	CertificationDataSubmission/ CertificationInformatio nDetails/ CertificationEvaporativ eInformationDetails/ CertifiedModelsDetails	TransmissionLockupI ndicator	1	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(1)	Enumeration				
TG-310	**Transmission Creeper Gear**	Does this model type have any transmission creeper gear(s)? Creeper gear is defined as having a gear ratio greater than 5:1.	CertificationDataSubmission/ CertificationInformatio nDetails/ CertificationEvaporativ eInformationDetails/ CertifiedModelsDetails	TransmissionCreeper GearIndicator	1	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(1)	Enumeration				
TG-311	**Total Number of Transmission Gears**	Enter the total number of forward transmission gears for this model type.	CertificationDataSubmission/ CertificationInformatio nDetails/ CertificationEvaporativ eInformationDetails/ CertifiedModelsDetails	TransmissionGearCo unt	1	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	N(2)	Integer				1
TG-312	**Drive system**	Enter the applicable drive system for this model.	CertificationDataSubmission/ CertificationInformatio nDetails/ CertificationEvaporativ eInformationDetails/ CertifiedModelsDetails	TestDriveCode	1	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(1)	Enumeration				

Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
	N = New dataset C = Correction of existing Verify dataset	Light-Duty	Certification		Manufacturer	Front End	XML	
		Light-Duty	Certification		Verify	Front End	XML	LD-CERT-TG-BR005 LD-CERT-TG-BR069 LD-CERT-TG-BR070 LD-CERT-TG-BR090 LD-CERT-TG-BR177
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR001a LD-CERT-TG-BR001b LD-CERT-TG-BR002 LD-CERT-TG-BR004 LD-CERT-TG-BR005 LD-CERT-TG-BR006 LD-CERT-TG-BR079 LD-CERT-TG-BR084 LD-CERT-TG-BR101
	N = New U = Update For Correction R = Update For Running Change	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR103
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR003
2100		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR001a LD-CERT-TG-BR001b LD-CERT-TG-BR002 LD-CERT-TG-BR004 LD-CERT-TG-BR084 LD-CERT-TG-BR089 LD-CERT-TG-BR090
	C = Combustion Engine E = Electric Motor	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-IB001
	N - No Y - Yes	Light-Duty	Certification		Verify	Back End	Assigned	LD-CERT-TG-BR105 LD-CERT-TG-BR162
	G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity HYD - Hydraulic	Light-Duty	Certification		Manufacturer	Front end	XML	LD-CERT-TG-BR106 LD-CERT-TG-BR107 LD-CERT-TG-BR158 LD-CERT-TG-BR159 LD-CERT-TG-BR160 LD-CERT-TG-BR210 LD-CERT-TG-IBR002a LD-CERT-TG-IBR007

	MFI = Multipoint/sequential fuel injection CMIX = CNG mixer unit GDI = Spark Ignition Direct fuel injection GDPI = Spark Ignition direct & ported injection LMIX = LPG Mixer CRDI = Common Rail Direct Diesel Injection GFI = Gaseous Fuel Injection DDI = Direct Diesel Injection (non-common rail) IDI = Indirect Diesel Injection TBI = Throttle Body Injection OT = Other (contact EPA prior to use)	Light-Duty	Certification			Manufacturer	Front End	XML		LD-CERT-TG-IBR003 LD-CERT-TG-BR108
	N=No Y=Yes	Light-Duty	Certification							LD-CERT-TG-BR109
1		Light-Duty	Certification			Manufacturer	Front End	XML		LD-CERT-TG-IBR005 LD-CERT-TG-BR112
	S - Fuels Stored Separately T- Fuels Stored Together	Light-Duty	Certification			Manufacturer	Front end	XML		LD-CERT-TG-BR113a LD-CERT-TG-BR113b
	S- Fuels Combusted Separately T - Fuels Combusted Together	Light-Duty	Certification			Manufacturer	Front end	XML		LD-CERT-TG-BR114
	N - No Y - Yes	Light-Duty	Certification			Manufacturer	Front end	XML		LD-CERT-TG-BR115
	N - No Y - Yes	Light-Duty	Certification			Manufacturer	Front end	XML		LD-CERT-TG-BR116
	N - No Y - Yes	Light-Duty	Certification			Manufacturer	Front end	XML		LD-CERT-TG-BR117
	Y = Yes N = No	Light-Duty	Certification			Manufacturer	Front End	XML		LD-CERT-TG-BR011
	LEV ULEV ZEV	Light-Duty	Certification			Manufacturer	Front End	XML		LD-CERT-TG-BR012

Verify Light-Duty Data Requirements

	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR013
	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	
		Light-Duty	Certification		Manufacturer	Front End	XML	
5.0		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-IBR006
	CA = California + CAA Section 177 states FA = Federal	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR015 LD-CERT-TG-BR019
9,999,999		Light-Duty	Certification		Manufacturer	Front End	XML	
	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR201
	For Federal or California Certification Region Codes: LDV - LDV/Passenger Car LDT1 - LDT1 (LVW-3750, GVW 0-6000), LDT2 - LDT2 (LVW 3751-5750, GVW 0-6000), LDVT - LDV and LDT1 For Federal Certification Region Code: LDT3 - LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000), LDT4 - LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000), MDPV - MDPV (Federal Tier 2, GVWR 8501-10000), HDV1 - HDV1 (Federal HD chassis Class 2b GVW 8501-10000), HDV2 - HDV2 (Federal HD chassis Class 3 GVW 10001-14000) For California Certification Region Code: M6 - MDV6 (Cal. LEV 2/3 MDV GVW 8501-10000), M7 - MDV7 (Cal. LEV 2/3 MDV GVW 10001-14000)	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR202
	F = Federal C = CARB	Light-Duty	Certification		Manufacturer	Front End	XML	

		Light-Duty	Certification		Manufacturer	Front End	XML	
	F = Full - no deficiencies PD = Partial - with deficiencies PDP = Partial - with deficiencies and penalty PSD = Partial - some models w/o deficiencies and some w/ deficiencies PSDP = Partial - some models w/o deficiencies and some w/ deficiencies and penalty	Light-Duty	Certification		Manufacturer	Front End	XML	
99		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR020
		Light-Duty	Certification		Manufacturer	Front End	XML	
	Y = Yes N = No	Light-Duty	Certification	If Y entered for TG-24 then must use reduced fee cert template for all certificates issued for this template. Data type exists.	Manufacturer	Front End	XML	
		Light-Duty	Certification		Manufacturer	Front End	XML	
	EM = IC Engine/Electric Motor EH = IC Engine/Hydraulic OT = Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR120 LD-CERT-TG-GBR002
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR023 LD-CERT-TG-GBR002
	4SI - 4-Stroke Spark Ignition 2SI - 2-Stroke Spark Ignition 4SCI - 4-Stroke Compression Ignition 2SCI - 2-Stroke Compression Ignition RT - Rotary GT - Gas Turbine RK - Rankine STIR - Stirling OT - Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR122 LD-CERT-TG-GBR002

		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR024 LD-CERT-TG-GBR002
	I = Inline V = V-shaped engine H = Horizontally Opposed W = W-shaped engine RT = Rotary OT = Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR125 LD-CERT-TG-GBR002
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR027 LD-CERT-TG-GBR002
20		Light-Duty	Certification	Leading 0s are not required.	Manufacturer	Front End	XML	LD-CERT-TG-BR127 LD-CERT-TG-GBR002
	N = No Y = Yes	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR163 LD-CERT-TG-GBR002
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR164 LD-CERT-TG-BR199 LD-CERT-TG-BR200 LD-CERT-TG-GBR002
99		Light-Duty	Certification		Verify	Front End	XML	LD-CERT-TG-GBR002
9,999		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR165a LD-CERT-TG-BR165b LD-CERT-TG-GBR002
99.999		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR030 LD-CERT-TG-GBR002
	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR031 LD-CERT-TG-GBR002

		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR032 LD-CERT-TG-GBR002
	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR031 LD-CERT-TG-GBR002
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR033 LD-CERT-TG-GBR002
	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR031 LD-CERT-TG-GBR002
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR034 LD-CERT-TG-GBR002
9		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR031 LD-CERT-TG-GBR002
9		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR031 LD-CERT-TG-GBR002
	NA=Naturally aspirated TC=Turbocharged SC=Supercharged TS=Turbocharged+Supercharged OT=Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR030 LD-CERT-TG-GBR002
99		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR073a LD-CERT-TG-BR073b LD-CERT-TG-BR075 LD-CERT-TG-BR076 LD-CERT-TG-BR179 LD-CERT-TG-GBR002

	N = Single P = Parallel S = Series PS = Both (Parallel and Series)	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR179 LD-CERT-TG-GBR002
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR035 LD-CERT-TG-GBR002
	A = Air L = Liquid N = N/A	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR083 LD-CERT-TG-GBR002
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR002
		Light-Duty	**Certification**					
		Light-Duty	**Certification**					
99		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR128 LD-CERT-TG-BR181 LD-CERT-TG-GBR001
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR001
99		Light-Duty	Certification		Verify	Front End	generated	LD-CERT-TG-BR166 LD-CERT-TG-GBR001
	TWC = Three-way catalyst OC = Oxidation catalyst HCAD = HC-Adsorber TWC+OC = Three-way catalyst plus oxidation catalyst DPF = Diesel Particulate Filter SCR = Selective Catalytic Reduction NOXAD = NOx Adsorber OT = Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR166 LD-CERT-TG-GBR001
	PT = Platinum PL = Paladium RH = Rhodium PT+PL = Platinum + Paladium PT+RH = Platinum + Rhodium PL+RH = Paladium + Rhodium PT+PL+RH = Platinum + Paladium + Rhodium OT = Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR167 LD-CERT-TG-GBR001

		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR037 LD-CERT-TG-GBR001
	M=Metal C=Ceramic	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR168 LD-CERT-TG-GBR001
	M=Monolith OT=Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR168 LD-CERT-TG-GBR001
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR038 LD-CERT-TG-GBR001
		Light-Duty	**Certification**					
99		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR170a LD-CERT-TG-BR170b LD-CERT-TG-BR182 LD-CERT-TG-GBR002
99		Light-Duty	Certification		Verify	Front End	generated	LD-CERT-TG-GBR002
	O2S = Oxygen HO2S = Heated oxygen AFS = Air fuel HAFS = Heated air fuel NOX = Nitrogen oxide OT = Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR171 LD-CERT-TG-GBR002

		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR040 LD-CERT-TG-GBR002
99		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR174a LD-CERT-TG-BR174b LD-CERT-TG-GBR002
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR002
		Light-Duty	**Certification**	**Each of the elements in the schema group ExhaustEmissionsControlDeviceDetails (TG-67 thorugh TG-73) occurs only once per engine configuration.**				
	Y = Yes N = No	Light-Duty	Certification	Repeats once per engine configuration.	Manufacturer	Front End	XML	LD-CERT-TG-GBR002
	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR002
	VVTC = Variable Valve Timing Control EEGR = Electronic/Electric VEGR = Vacuum OT = Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR002
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR002
	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR002

AIR = Secondary Air Injection PAIR = Pulsed Secondary Air Injection NA =Not Applicable OT = Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR002
	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR002
CR = Catalytic Radiator NE = Not Equipped OT = Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR001
	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR001
	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR001
	Light-Duty	**Certification**					
B = Battery(s) C = Capacitor OT = Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR118 LD-CERT-TG-GBR003
	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR042 LD-CERT-TG-GBR003
LA = Lead Acid NIMH = NiMH LI = Lithium Ion OT = Other	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR131 LD-CERT-TG-GBR003
	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR132 LD-CERT-TG-GBR003

999			Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR133 LD-CERT-TG-GBR003
999			Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR134 LD-CERT-TG-GBR003
9999.99			Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR135 LD-CERT-TG-GBR003
9999.9			Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR136 LD-CERT-TG-GBR003
	ON = On-Board OFF = Off-Board B = Both		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR137 LD-CERT-TG-GBR003
99			Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR138 LD-CERT-TG-GBR003
99.99			Light-Duty	Certification	Repeats once per each TG-86.	Manufacturer	Front End	XML	LD-CERT-TG-BR046 LD-CERT-TG-BR139 LD-CERT-TG-GBR003
			Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR003
			Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR180 LD-CERT-TG-GBR003
	NA = Not applicable (default) ERE = Electrical Regen Brake HRE = Hydraulic Regen Brake OT = Other		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR086 LD-CERT-TG-GBR003

		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR048 LD-CERT-TG-GBR003
	F = Front Wheels R = Rear Wheels B = Both	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR049 LD-CERT-TG-GBR003
	N = No Y = Yes	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR049 LD-CERT-TG-GBR003
9		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR050 LD-CERT-TG-GBR003
	ACI = AC Induction DCB = DC Brushless DCPM = DC Permanent Magnet, brushless SR = Switched Reluctance OT = Other	Light-Duty	Certification	TG-95- TG-97 comprise a repeating group per each TG-94.	Manufacturer	Front End	XML	LD-CERT-TG-BR052 LD-CERT-TG-GBR003
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR051 LD-CERT-TG-GBR003
999		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR052 LD-CERT-TG-GBR003
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR140a LD-CERT-TG-BR140b LD-CERT-TG-GBR003
999.99		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR141a LD-CERT-TG-BR141b LD-CERT-TG-GBR003
999.99		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR055 LD-CERT-TG-GBR003

				Verify Light-Duty Data Requirements				
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-GBR003
		Light-Duty	**Certification**					
	CA = California + CAA Section 177 states FA = Federal	Light-Duty	Certification	Same as element TG-305 if Both is excluded.	Manufacturer	Front End	XML	
	C = Certification IU = In-Use B = Both	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR064b LD-CERT-TG-BR064c LD-CERT-TG-BR065b LD-CERT-TG-BR065c LD-CERT-TG-BR066 LD-CERT-TG-BR215 LD-CERT-TG-BR216 LD-CERT-TG-BR217 LD-CERT-TG-BR218
	For Federal or California Certification Region Codes: LDV - LDV/Passenger Car LDT1 - LDT1 (LVW-3750, GVW 0-6000), LDT2 - LDT2 (LVW 3751-5750, GVW 0-6000), LDVT - LDV and LDT1 For Federal Certification Region Code: LDT3 - LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000), LDT4 - LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000), MDPV - MDPV (Federal Tier 2, GVWR 8501-10000), HDV1 - HDV1 (Federal HD chassis Class 2b GVW 8501-10000), HDV2 - HDV2 (Federal HD chassis Class 3 GVW 10001-14000) For California Certification Region Code: M6 - MDV6 (Cal. LEV 2/3 MDV GVW 8501-10000), M7 - MDV7 (Cal. LEV 2/3 MDV GVW 10001-14000)	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR016

			Verify Light-Duty Data Requirements				
	B1 = Federal Tier 2 Bin 1 B2 = Federal Tier 2 Bin 2 B3 = Federal Tier 2 Bin 3 B4 = Federal Tier 2 Bin 4 B5 = Federal Tier 2 Bin 5 B6 = Federal Tier 2 Bin 6 B7 = Federal Tier 2 Bin 7 B8 = Federal Tier 2 Bin 8 B9 = Federal Tier 2 Bin 9 B10 = Federal Tier 2 Bin 10 B11 = Federal Tier 2 Bin 11 HDV1 = HDV1 (Federal HD chassis Class 2b GVW 8501-10000) HDV2 = HDV2 (Federal HD chassis Class 3 GVW 10001-14000) L2 = California LEV-II LEV L2OP = California LEV-II LEV Optional U2 = California LEV-II ULEV S2 = California LEV-II SULEV ZEV = California ZEV PZEV = California PZEV	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR081a LD-CERT-TG-BR081b LD-CERT-TG-BR102
	L2LEV160 - California LEV-II LEV160 L2ULEV125 - California LEV-II ULEV125 L2SULEV30 - California LEV-II SULEV30 L2LEV395 - California LEV-II LEV395 L2ULEV340 - California LEVII ULEV340 L2LEV630 - California LEV-II LEV630 L2ULEV570 - California LEV-II ULEV570 L3LEV160 - California LEV-III LEV160 L3ULEV125 - California LEV-III ULEV125 L3ULEV70 - California LEV-III ULEV70 L3ULEV50 - California LEV-III ULEV50 L3SULEV30 - California LEV-III SULEV30 L3SULEV20 - California LEV-III SULEV20 L3LEV395 - California LEV-III LEV395 L3ULEV340 - California LEV-III ULEV340 L3ULEV250 - California LEV-III ULEV250 L3ULEV200 - California LEV-III ULEV200 L3SULEV170 - California LEV-III SULEV170 L3SULEV150 - California LEV-III SULEV150 L3LEV630 - California LEV-III LEV630 L3ULEV570 - California LEV-III ULEV570 L3ULEV400 - California LEV-III ULEV400 L3ULEV270 - California LEV-III ULEV270 L3SULEV230 - California LEV-III SULEV230 L3SULEV200 - California LEV-III SULEV200 OT = Other T1 = Federal Tier 1 (for use by ICIs only)							

T3B160 - Federal Tier 3 Bin 160 T3B125 - Federal Tier 3 Bin 125 T3B110 - Federal Tier 3 Transitional Bin 110 T3B85 - Federal Tier 3 Transitional Bin 85 T3SULEV30 - Federal Tier 3 Transitional LEVII-SULEV30 Carryover T3B70 - Federal Tier 3 Bin 70 T3B50 - Federal Tier 3 Bin 50 T3B30 - Federal Tier 3 Bin 30 T3B20 - Federal Tier 3 Bin 20 T3B0 - Federal Tier 3 Bin 0 HDV2B395 - Federal Tier 3 HD Class 2b Transitional Bin 395 HDV2B340 - Federal Tier 3 HD Class 2b Transitional Bin 340 HDV2B250 - Federal Tier 3 HD Class 2b Bin 250 HDV2B170 - Federal Tier 3 HD Class 2b Bin 170 HDV2B150 - Federal Tier 3 HD Class 2b Bin 150 HDV2B0 - Federal Tier 3 HD Class 2b Bin 0 HDV3B630 - Federal Tier 3 HD Class 3 Transitional Bin 630 HDV3B570 - Federal Tier 3 HD Class 3 Transitional Bin 570 HDV3B400 - Federal Tier 3 HD Class 3 Bin 400 HDV3B270 - Federal Tier 3 HD Class 3 Bin 270 HDV3B230 - Federal Tier 3 HD Class 3 Bin 230 HDV3B200 - Federal Tier 3 HD Class 3 Bin 200 HDV3B0 - Federal Tier 3 HD Class 3 Bin 0			ents NEW Business Rule : 'T3B110', 'T3B85' and 'T3SULEV30' are not allowed for Model Year (TG-6) 2020 and later. NEW Business Rule : 'HDV2B395', 'HDV2B340', 'HDV3B630' and 'HDV3B570' are not allowed for Model Year (TG-6) 2022 and later.				LD-CERT-TG-BR205 LD-CERT-TG-BR206
G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity	Light-Duty	Certification	Multi-fueled vehicles will have at least one test # for each fuel type/test category combination.	Manufacturer	Front End	XML	LD-CERT-TG-IBR002c
2 = CVS 75 AND LATER (W/O CAN. LOAD) 3 = HWFE (HIGHWAY TEST) 9 = HWY80 (80 mph Highway Test) 10 = IDLE CO 11 = COLD CO 15 = SPITBACK TEST 16 = Hot 1435 LA92 21 = FED FUEL 2 DAY EXH (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (ORVR) (BUTANE) 25 = CA FUEL 2 DAY EXH (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EXH (BUTANE LOAD) 32 - FED FUEL RUNNING LOSS 34 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 35 = CA FUEL 3 DAY EXH (BUTANE LOAD) 37 = CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EXH(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (ORVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EXH (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEG(F) EXHAUST TEST 52 = FED FUEL 50 DEG(F) EXHAUST TEST 60 = AC17 - Manual A/C Controls 61 = AC17 - Automatic A/C Controls 64 = Evap CARB Fuel Only (Rig) Test 65 = Evap Canister Bleed Test 66 = Leak Test - Evap Fuel System OBD 67 = Leak Test - Port Near Canister 68 = Leak Test - Port Near Fuel Pipe 69 = Leak Test - Evap Gas Cap 72 = CST TWO SPEED IDLE TEST 76 = CST PRECD 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 83 = Charge Depleting US06 84 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 20 Degree F FTP 87 = A/C Idle Test- Manual A/C 88 = A/C Idle Test- Automatic A/C 90 = US06 95 = SC03 96 = US06 Bag 2 Only	Light-Duty	Certification		Manufacturer	Front end	XML	

	4 = 4,000 miles 50 = 50,000 miles 100 = 100,000 miles 120 = 120,000 miles 150 = 150,000 miles	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR064b LD-CERT-TG-BR064c LD-CERT-TG-BR065b LD-CERT-TG-BR066 LD-CERT-TG-BR215 LD-CERT-TG-BR216 LD-CERT-TG-BR217 LD-CERT-TG-BR218
	HC-TOTAL (Total Hydrocarbon) HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only) CO (Carbon Monoxide) CO2 (Carbon Dioxide) CREE (Carbon-Related Exhaust Emissions) OPT-CREE (Optional Carbon-Related Exhaust Emissions) NOX (Nitrogen Oxides) PM (Particulate Matter) PM-COMP (SFTP Composite Particulate Matter) HC-NM (Non-methane Hydrocarbon) OMHCE (Organic material Hydrocarbon equivalent) OMNMHCE (Organic material non-methane Hydrocarbon equivalent) NMOG (Non-methane organic gases (California)) HCHO (Formaldehyde) H3C2HO (Acetaldehyde) HC-NM+NOX (SFTP Non-methane Hydrocarbon+Nitrogen Oxides for US06 or SC03) HC-NM+NOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides) CO-COMP (SFTP Composite Carbon Monoxide) NMOG+NOX (Non-methane Organic Gases Plus Nitrogen Oxides) NMOG+NOX-COMP (SFTP Composite Non-methane Organic Gases Plus Nitrogen Oxides) ETHANOL (C2H5OH- Ethanol) FE BAG 1 (Bag 1 Fuel Economy) FE BAG 2 (Bag 2 Fuel Economy) FE BAG 3 (Bag 3 Fuel Economy) FE BAG 4 (Bag 4 Fuel Economy) CO2 BAG 1 (Bag 1 Carbon Dioxide) CO2 BAG 2 (Bag 2 Carbon Dioxide) CO2 BAG 3 (Bag 3 Carbon Dioxide) CO2 BAG 4 (Bag 4 Carbon Dioxide) MFR FE (Manufacturer Fuel Economy) HC (Hydrocarbon for Running Loss and ORVR) METHANE (CH4) (Methane) METHANE-COMB (Combined CH4 for HD 2b/3 vehicles only) METHANOL (CH3OH) (Methanol) N2O (Nitrous Oxide) N2O-COMB (Combined Nitrous Oxide for HD 2b/3 vehicles only) SPITBACK (Spitback Hydrocarbon in grams) DT-IWRR (Drive Trace Inertia Work Ratio Rating) DT-ASCR (Drive Trace Absolute Speed Change Rating) DT-EER (Drive Trace Energy Economy Rating) LEAK-DIA - Effective Leak Diameter (inches) LEAK-GAS CAP - Gas Cap Leakage (cc/min) Allowed For Charge Depleting Test Procedures Only: AMP-HRS (Integrated Amp-hours) START-SOC (System Start State of Charge Watt-hours) END-SOC (System End State of Charge Watt-hours) ACT-DISTANCE (Actual Distance Driven (miles)) AS-VOLT (Average System Voltage)	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR064a LD-CERT-TG-BR065a LD-CERT-TG-BR097 LD-CERT-TG-BR099 LD-CERT-TG-BR176 LD-CERT-TG-BR188 LD-CERT-TG-BR203 LD-CERT-TG-BR204 LD-CERT-TG-BR214
999.9999		Light-Duty	Certification		Verify	Backend	Assigned	
		Light-Duty	Certification		Manufacturer	Front End	XML	
	MFRA = Mfr. Assigned EPAA = EPA Assigned MFRD = Mfr. Determined AGED = Aged components installed In the emission data vehicle	Light-Duty	Certification		Manufacturer	Front End	XML	
	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	

9.99		Light-Duty	Certification		Manufacturer	Front End	XML	
9.999999		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR188 LD-CERT-TG-BR203
9.999		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR188 LD-CERT-TG-BR203
9.999999		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR077
9.999999		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR078
99,999		Light-Duty	Certification	use for NMOG, Methane. Note: for Tier 2 (Bin 1-11) emissions it will be defaulted to 1.0 for NMOG and 0.0 for Methane	Manufacturer	Front End	XML	
		Light-Duty	Certification		Manufacturer	Front End	XML	
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR084 LD-CERT-TG-BR090 LD-CERT-TG-BR104
	CA = California + CAA Section 177 states FA = Federal	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR095a LD-CERT-TG-BR095b

C = Certification IU = In-Use B = Both	Light-Duty	Certification		Manufacturer	Front End	XML	
T1 - Federal Tier 1 Evap T2 - Federal Tier 2 Evap T3 - Federal Tier 3 Evap T3-3Z - Federal Tier 3 LEV-III Zero Evap (Option 1) Carryover F2 - Federal LEV-II Evap C2 - California LEV-II Evap ZZ - California LEV-II Zero Evap 3Z = California LEV-III Zero Evap (Option 1) 4Z = California LEV-III Zero Evap (Option 2) HD-2D = Federal Heavy-Duty 2-Day Evap (1.75 grams) HD-3D = Federal Heavy-Duty 3-Day Evap (1.4 grams) OT = Other	Light-Duty	Certification	T1 previously called ENHA in CFEIS NEW Business Rule : 'T3-3Z' is not allowed for Model Year (TG-6) 2022 and later.	Manufacturer	Front End	XML	LD-CERT-TG-BR207
G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-IBR002d
2 = CVS 75 AND LATER (W/O CAN. LOAD) 3 = HWFE (HIGHWAY TEST) 9 = HWY80 (80 mph Highway Test) 10 = IDLE CO 11 = COLD CO 15 = SPITBACK TEST 16 = Hot 1435 LA92 21 = FED FUEL 2 DAY EXH (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (ORVR) (BUTANE) 25 = CA FUEL 2 DAY EXH (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EXH (BUTANE LOAD) 32 - FED FUEL RUNNING LOSS 34 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 35 = CA FUEL 3 DAY EXH (BUTANE LOAD) 37 = CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EXH(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (ORVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EXH (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEG(F) EXHAUST TEST 52 = FED FUEL 50 DEG(F) EXHAUST TEST 60 = AC17 - Manual A/C Controls 61 = AC17 - Automatic A/C Controls 64 = Evap CARB Fuel Only (Rig) Test 65 = Evap Canister Bleed Test 66 = Leak Test - Evap Fuel System OBD 67 = Leak Test - Port Near Canister 68 = Leak Test - Port Near Fuel Pipe 69 = Leak Test - Evap Gas Cap 72 = CST TWO SPEED IDLE TEST 76 = CST PRECD 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 83 = Charge Depleting US06 84 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 20 Degree F FTP 87 = A/C Idle Test- Manual A/C 88 = A/C Idle Test- Automatic A/C 90 = US06 95 = SC03 96 = US06 Bag 2 Only	Light-Duty	Certification		Manufacturer	Front end	XML	

				Verify Light-Duty Data Requirements				
	4 = 4,000 miles 50 = 50,000 miles 100 = 100,000 miles 120 = 120,000 miles 150 = 150,000 miles	Light-Duty	Certification		Manufacturer	Front End	XML	
	HC-TOTAL (Total Hydrocarbon) HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only) CO (Carbon Monoxide) CO2 (Carbon Dioxide) CREE (Carbon-Related Exhaust Emissions) OPT-CREE (Optional Carbon-Related Exhaust Emissions) NOX (Nitrogen Oxides) PM (Particulate Matter) PM-COMP (SFTP Composite Particulate Matter) HC-NM (Non-methane Hydrocarbon) OMHCE (Organic material Hydrocarbon equivalent) OMNMHCE (Organic material non-methane Hydrocarbon equivalent) NMOG (Non-methane organic gases (California)) HCHO (Formaldehyde) H3C2HO (Acetaldehyde) HC-NM+NOX (SFTP Non-methane Hydrocarbon+Nitrogen Oxides for US06 or SC03) HC-NM+NOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides) CO-COMP (SFTP Composite Carbon Monoxide) NMOG+NOX (Non-methane Organic Gases Plus Nitrogen Oxides) NMOG+NOX-COMP (SFTP Composite Non-methane Organic Gases Plus Nitrogen Oxides) ETHANOL (C2H5OH- Ethanol) FE BAG 1 (Bag 1 Fuel Economy) FE BAG 2 (Bag 2 Fuel Economy) FE BAG 3 (Bag 3 Fuel Economy) FE BAG 4 (Bag 4 Fuel Economy) CO2 BAG 1 (Bag 1 Carbon Dioxide) CO2 BAG 2 (Bag 2 Carbon Dioxide) CO2 BAG 3 (Bag 3 Carbon Dioxide) CO2 BAG 4 (Bag 4 Carbon Dioxide) MFR FE (Manufacturer Fuel Economy) HC (Hydrocarbon for Running Loss and ORVR) METHANE (CH4) (Methane) METHANE-COMB (Combined CH4 for HD 2b/3 vehicles only) METHANOL (CH3OH) (Methanol) N2O (Nitrous Oxide) N2O-COMB (Combined Nitrous Oxide for HD 2b/3 vehicles only) SPITBACK (Spitback Hydrocarbon in grams) DT-IWRR (Drive Trace Inertia Work Ratio Rating) DT-ASCR (Drive Trace Absolute Speed Change Rating) DT-EER (Drive Trace Energy Economy Rating) LEAK-DIA - Effective Leak Diameter (inches) LEAK-GAS CAP - Gas Cap Leakage (cc/min) Allowed For Charge Depleting Test Procedures Only: AMP-HRS (Integrated Amp-hours) START-SOC (System Start State of Charge Watt-hours) END-SOC (System End State of Charge Watt-hours) ACT-DISTANCE (Actual Distance Driven (miles)) AS-VOLT (Average System Voltage)	Light-Duty	Certification	CREE and Opt-CREE are not valid values here. Need to a business rule that doesn't allow CREE or Opt-CREE to be selected here as a standard or DF.	Manufacturer	Front End	XML	LD-CERT-TG-BR095a LD-CERT-TG-BR095b LD-CERT-TG-BR098 LD-CERT-TG-BR100 LD-CERT-TG-BR161
999.9999		Light-Duty	Certification	Note: The system shall support the entry of emission standards by the user and may additionally provide default values if EPA has applicable standards. Insert emission standard numerical value	Verify	Back End	Assigned	
					Manufactuer	Front End	XML	
	MFRA = Mfr. Assigned EPAA = EPA Assigned MFRD = Mfr. Determined AGED = Aged components installed In the emission data vehicle	Light-Duty	Certification		Manufacturer	Front End	XML	
9.999999		Light-Duty	Certification		Manufacturer	Front End	XML	

		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR056 LD-CERT-TG-BR092
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR088 LD-CERT-TG-BR091 LD-CERT-TG-BR189 LD-CERT-TG-BR211
	NE = Not Exempt SBA = Small Business Administration Exemption CE = Conditional Exemption	Light-Duty	Certification	The pull-down list should be displayed in this order: NE, SBA, CE. This field will determine whether Verify calculates CREE and optional CREE and determine whether the GHG-specific Test Results/Emission Names are required.	Manufacturer	Front End	XML	LD-CERT-TG-IBR004 LD-CERT-TG-BR172
	TIER2 = Tier 2 TIER3 = Tier 3 NA = Not Applicable	Light-Duty	Certification	New BR: SFTP Compliance Indicator (TG-216.8) and SFTP Tier 3 Compliance Indicator (TG-260) cannot both equal 'Y' (Yes). Data element has been changed.	Manufacturer	Front End	XML	
	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR061
	Y = Yes N = No	Light-Duty	Certification	NOTE: If this field equals 'Y' the LEVIII SFTP calculations should be triggered. These calculations are: NMOG + NOx Composite (for Test Result/Emission Name 'NMOG+NOX-COMP') and CO Composite (same as current CO Composite calculation). EPA and CSC need to discuss details. *This field may not be necessary.	Manufacturer	Front End	XML	

		Light-Duty	Certification	ents **Note: Need to modify existing business rules for Tier 3. For example, if Tier SFTP Tier 3 Compliance Indicator (TG-260) is equal to 'Y' (Yes) then NMOG is required (or NMHC and Ratio of NMOG/NMHC (TG-207) is required.	Manufacturer	Front End	XML	LD-CERT-TG-BR057 LD-CERT-TG-BR062a LD-CERT-TG-BR063a LD-CERT-TG-BR064b LD-CERT-TG-BR064c LD-CERT-TG-BR065b LD-CERT-TG-BR066 LD-CERT-TG-BR080a LD-CERT-TG-BR143 LD-CERT-TG-BR144 LD-CERT-TG-BR145 LD-CERT-TG-BR190 LD-CERT-TG-BR192 LD-CERT-TG-BR215 LD-CERT-TG-BR216 LD-CERT-TG-BR240
G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity		Light-Duty	Certification	**Note: Need to determine whether existing business rules need to be modified for Tier 3 SFTP compliance. For example, SFTP compliance is required for alternative fuels (other than electricity).	Manufacturer	Front End	XML	LD-CERT-TG-IBR002b LD-CERT-TG-BR158 LD-CERT-TG-BR160 LD-CERT-TG-BR190 LD-CERT-TG-BR191
G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity		Light-Duty	Certification		Manufacturer	Front End	XML	
		Light-Duty	Certification	**Note: Need to modify existing business rules to allow new Heavy-Duty Class 3 and 2b test procedures '16' and '96' as one of the official US06 test procedures, if necessary. **Note: Need to modify existing business rules for Tier 3. For example, if Tier SFTP Tier 3 Compliance Indicator (TG-260) is equal to 'Y' (Yes) then NMOG is required (or NMHC and Ratio of NMOG/NMHC (TG-207) is required.	Manufacturer	Front End	XML	LD-CERT-TG-BR059 LD-CERT-TG-BR062b LD-CERT-TG-BR063b LD-CERT-TG-BR080b LD-CERT-TG-BR156 LD-CERT-TG-BR190 LD-CERT-TG-BR193 LD-CERT-TG-BR242

			ents				
		Light-Duty	Certification	**Note: Need to modify existing business rules for Tier 3. For example, if Tier SFTP Tier 3 Compliance Indicator (TG-260) is equal to 'Y' (Yes) then NMOG is required (or NMHC and Ratio of NMOG/NMHC (TG-207) is required.	Manufacturer	Front End	XML	LD-CERT-TG-BR060 LD-CERT-TG-BR062c LD-CERT-TG-BR063c LD-CERT-TG-BR080c LD-CERT-TG-BR146 LD-CERT-TG-BR185 LD-CERT-TG-BR190 LD-CERT-TG-BR194 LD-CERT-TG-BR231 LD-CERT-TG-BR244
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR148 LD-CERT-TG-BR149 LD-CERT-TG-BR190 LD-CERT-TG-BR195
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR150 LD-CERT-TG-BR151 LD-CERT-TG-BR190 LD-CERT-TG-BR191 LD-CERT-TG-BR196
	G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity HYD - Hydraulic	Light-Duty	Certification	**Note: Need to add business rules for this 'Test Group Fuel - SFTP LEV-III' field similar to the business rules for "Test Group Fuel" (TG-217.1).	Manufacturer	Front End	XML	LD-CERT-TG-BR210
		Light-Duty	Certification	**Note: Need to add business rules for this 'Official SFTP LEV-III FTP Test Number' field similar to the business rules for Official FTP test number (TG-217). For example, if SFTP LEVIII Compliance Indicator (TG-261) is equal to 'Y' (Yes) then NOx is required and NMOG (or NMHC and Ratio of NMOG/NMHC (TG-207)) is required.	Manufacturer	Front End	XML	LD-CERT-TG-BR065c LD-CERT-TG-BR209 LD-CERT-TG-BR213 LD-CERT-TG-BR217 LD-CERT-TG-BR218 LD-CERT-TG-BR219 LD-CERT-TG-BR228 LD-CERT-TG-BR239 LD-CERT-TG-BR241
		Light-Duty	Certification	**Note: Need to add business rules for this 'Official SFTP LEV-III US06 Test Number' field similar to the business rules for Official US06 Test Number (TG-218). For example, if SFTP LEVIII Compliance Indicator (TG-261) is equal to 'Y' (Yes) then NOx is required and NMOG (or NMHC and Ratio of NMOG/NMHC (TG-207)) is required.	Manufacturer	Front End	XML	LD-CERT-TG-BR225 LD-CERT-TG-BR226 LD-CERT-TG-BR229 LD-CERT-TG-BR243 LD-CERT-TG-BR247

			Light-Duty	Certification	**Note: Need to add business rules for this 'Official SFTP LEV-III SC03 Test Number' field similar to the business rules for Official SC03 Test Number (TG-219). For example, if SFTP LEVIII Compliance Indicator (TG-261) is equal to 'Y' (Yes) then NOx is required and NMOG (or NMHC and Ratio of NMOG/NMHC (TG-207)) is required.	Manufacturer	Front End	XML	LD-CERT-TG-BR230 LD-CERT-TG-BR236 LD-CERT-TG-BR237 LD-CERT-TG-BR246 LD-CERT-TG-BR245
			Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR187 LD-CERT-TG-BR191 LD-CERT-TG-BR197
999.9			Light-Duty	Certification	EPA City Litmus Value = 0.905 / [(0.33 * ((0.76 * (3.6 * (1/FTP75B1 - 1/FTP75B3) + 3.9 * (1/FTP75B2 - 1/FTP75B4)) + 0.24 * (3.6 * (1/FTP20B1 - 1/FTP20B3))) / 4.1)) + (0.82 * (0.48/FTP75B4 + 0.41/FTP75B3 + 0.11/US06B1) + 0.18 * (0.5/FTP20B2 + 0.5/FTP20B3) + 0.133 * 1.083 * (1/SC03 - (0.61/FTP75B3 + 0.39/FTP75B4)))]

*** If Hybrid indicator (TG-7.2) = "Yes" and Official FTP Test Number (TG-217) DOES NOT have Test Result/Emission Name (TI-19) equal to "FE BAG 4" then: EPA City Litmus Value = 0.905 / [(0.33 * ((0.76 * (7.5 * (1/FTP75B1 - 1/FTP75B2)) + 0.24 * (3.6 * (1/FTP20B1 - 1/FTP20B3))) / 4.1)) + (0.82 * (0.9/FTP75B2 + 0.1/US06B1) + 0.18 * (0.5/FTP20B2 + 0.5/FTP20B3) + 0.133 * 1.083 * (1/SC03 - (1/FTP75B2)))]

All "RAFE" values and "FE BAG x" values should be ASTM E67 rounded to 1 decimal place before using in ANY equation listed above.

The EPA City Litmus Value should be ASTM E67 rounded to 1 decimal place. | Verify | Back End | Assigned | LD-CERT-TG-BR184 LD-FE-GL-BR118 LD-FE-GL-BR119 |
| 999.9 | | | Light-Duty | Certification | EPA City Litmus Threshold = [1 / (CityOffset + CitySlope / FE)] x 0.96

Where:
CitySlope = Derived 5C City Slope Constant (GL-180) specified for the Model Year
CityOffset = Derived 5C City Offset Constant (GL-181) specified for the Model Year
FE = Official City Test Number (TG-217) Test Result/Emission Name (TI-19) equal to "RAFE", ASTM E67 rounded to 1 decimal place.

The resulting Litmus Threshold calculation is ASTM E-67 rounded to 1 decimal place | Verify | Back End | Assigned | LD-CERT-TG-BR152 LD-CERT-TG-BR153 LD-CERT-TG-BR154 LD-FE-GL-BR118 LD-FE-GL-BR119 |
| | | | Light-Duty | Certification | | Manufacturer | Front End | XML | LD-CERT-TG-BR186 LD-CERT-TG-BR198 |

Verify Light-Duty Data Requirements

999.9		Light-Duty	Certification	*** If Hybrid indicator (TG-7.2) = "Yes" and Official FTP Test Number (TG-217) has Test Result/Emission Name (TI-19) equal to "FE BAG 4" then: EPA Highway Litmus Value = 0.905 / [(0.33 * ((0.76 * (3.6 * (1/FTP75B1 - 1/FTP75B3) + 3.9 * (1/FTP75B2 - 1/FTP75B4)) + 0.24 * (3.6 * (1/FTP20B1 - 1/FTP20B3))) / 60)) + (1.007 * (0.79/US06B2 + 0.21/HFET) + 0.133 * 0.377 * (1/SC03 - (0.61/FTP75B3 + 0.39/FTP75B4)))] *** If Hybrid indicator (TG-7.2) = "Yes" and Official FTP Test Number (TG-217) DOES NOT have Test Result/Emission Name (TI-19) equal to "FE BAG 4" then: EPA Highway Litmus Value = 0.905 /[(0.33 * ((0.76 * (7.5 * (1/FTP75B1 - 1/FTP75B2)) + 0.24 * (3.6 * (1/FTP20B1 - 1/FTP20B3))) / 60)) + (1.007 * (0.79/US06B2 + 0.21/HFET) + 0.133 * 0.377 * (1/SC03 - (1/FTP75B2)))] All "RAFE" values and "FE BAG x" values should be ASTM E67 rounded to 1 decimal place before using in ANY equation listed above. The EPA City Litmus Value should be ASTM E67 rounded to 1 decimal place.	Verify	Back End	Assigned	LD-CERT-TG-BR183 LD-FE-GL-BR119
999.9		Light-Duty	Certification	EPA Highway Litmus Threshold = [1 / (HwyOffset + HwySlope / FE)] x 0.95 Where: HwySlope = Derived 5C Highway Slope Constant (GL-182) specified for the Model Year HwyOffset = Derived 5C Highway Offset Constant (GL-183) specified for the Model Year FE = Official Highway Test Number (TG-219.2) Test Result/Emission Name (TI-19) equal to "RAFE", ASTM E67 rounded to 1 decimal place. The resulting Litmus Threshold calculation is ASTM E-67 rounded to 1 decimal place	Verify	Back End	Assigned	LD-CERT-TG-BR155 LD-FE-GL-BR119
9999.9999		Light-Duty	Certification		Verify	Back End	Assigned	
9999.9999		Light-Duty	Certification		Verify	Back End	Assigned	
9999.9999		Light-Duty	Certification		Verify	Back End	Assigned	
9999.9999		Light-Duty	Certification		Verify	Back End	Assigned	
9999.9999		Light-Duty	Certification		Verify	Back End	Assigned	
9999.9999		Light-Duty	Certification		Verify	Back End	Assigned	

				Verify	Back End	Assigned	
9999.9999999		Light-Duty	Certification	Must use ASTM rounding methodology.	Verify	Back End	Assigned	
9999.9999		Light-Duty	Certification	Verify should calculate cert levels	Verify	Back End	Assigned	
	Pass = Cert Level <= Standard Fail = Cert Level > Standard	Light-Duty	Certification	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Pass/Fail Indicator to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail". Pass/Fail will not be determined for: CREE/OPT-CREE.	Verify	Back End	Assigned	
9999.9999999		Light-Duty	Certification	Must use ASTM rounding methodology.	Verify	Back End	Assigned	
9999.9999		Light-Duty	Certification	Verify should calculate cert levels	Verify	Back End	Assigned	
	Pass = Cert Level <= Standard Fail = Cert Level > Standard	Light-Duty	Certification	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Pass/Fail Indicator to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail".	Verify	Back End	Assigned	

			ents				
FTP = Federal Test Procedure US06 = US06 SC03 = SC03 HWY = Highway NOx EVAP = Evaporative SPIT = Spitback ORVR = On-board Refueling Vapor Recovery NCNHE = Non-City, Non-Highway Exhaust URBRNG = Urban Range HWYRNG = Highway Range AC-IDLE = A/C Idle Test CD = Charge Depleting EVAP-COMP = Evaporative - Component EVAP-LEAK = Evaporative - Leak	Light-Duty	Certification Test Data	This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories. EVAP = 23, 27, 34, 38, 43, 47 FTP = 2, 11, 21, 25, 31, 35, 41, 45, 51, 52 HWY = 3 HWYRNG = 63 NCNHE = 9, 10, 72, 76 ORVR = 24, 32, 37, 44 SC03 = 95 SPIT = 15 URBRNG = 62 US06 = 16, 90, 96 A/C Idle = 60, 61, 87, 88 Charge Depleting = 81, 83, 84, 85, 86 EVAP-COMP = 64, 65 EVAP-LEAK = 66, 67, 68, 69	Verify	Back End	Pre-existing Data	
		Light-Duty	Certification	CarlineMfr Code + Model Year + Division Code + Carline Code identify a unique carline. The carline mfr code can/will be different than the mfr code in TG-1 (Parent = Test Group Identification Details). Note- The entire set of Certified Models Info must be 1..n so need to delete "minOccurs = 0" from CertifiedModelsDetails in schema.	Manufacturer	Front End	XML	LD-CERT-TG-BR067 LD-CERT-TG-BR089
99		Light-Duty	Certification	Carline Mfr Code + Model Year + Division Code + Carline Code identify a unique carline.	Manufacturer	Front End	XML	LD-CERT-TG-BR089
999		Light-Duty	Certification	Carline Mfr Code + Model Year + Division Code + Carline Code identify a unique carline.	Manufacturer	Front End	XML	LD-CERT-TG-BR089
	CA = California + CAA Section 177 states FA = Federal	Light-Duty	Certification		Manufacturer	Front End	XML	

	A = Automatic AM = Automated Manual M = Manual SA = Semi-Automatic CVT= Continuously Variable SCV=Selectable Continuously Variable (e.g. CVT with paddles) AMS= Automated Manual- Selectable (e.g. Automated Manual with paddles) OT = Other	Light-Duty	Certification		Manufacturer	Front End	XML	
		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR068
	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	
	Y = Yes N = No	Light-Duty	Certification		Manufacturer	Front End	XML	
99		Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR096
	4 = 4-wheel Drive F = 2-wheel Drive, front R = 2-wheel drive, rear P= Part-time 4-wheel drive A = All wheel drive	Light-Duty	Certification		Manufacturer	Front End	XML	

Tier 3 Update (Release 15.0)

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value
Fuel Economy Label Information															
GL-0.5	**Process Code**	Select the desired process code for the current submission.	FuelEconomyLabel Submission/ FuelEconomyLabel Details	InformationProcessCode	1	1 per FE Label	A(1)	Enumeration							
		Model Type Information (A Model Type is defined as "a unique combination of Carline, Basic Engine and Transmission Class")													
GL-1	**Model Type Index**	Enter the Manufacturer-assigned index number for this model type. It is used as a link to the data set that is associated with the label of this Model Type.	FuelEconomyLabel Submission/ FuelEconomyLabel Details	ModelTypeIndexNumber	1	1 per FE Label	N(3)	Integer						1	999
GL-2	**Manufacturer Code**	The three character code assigned by EPA to each manufacturer. This will be derived from users' CDX account.	FuelEconomyLabel Submission/ FuelEconomyLabel Details	EPAManufacturerCode	1	1 per FE Label	A(3)	String	3	3	[A-Z0-9]{3}				
GL-3	**Model Year**	Enter the applicable Model Year for this FE Label.	FuelEconomyLabel Submission/ FuelEconomyLabel Details	ModelYear	1	1 per FE Label	N(4)	Year	4	4				1957	2100
GL-4	**Manufacturer FE Label Comments**	Enter any additional comments regarding the FE Label for this Model Type.	FuelEconomyLabel Submission/ FuelEconomyLabel Details	FuelEconomyLabelCommentText	0	1 per FE Label	A(1000)	String	1	1000					
GL-6	**Date Submitted**	A system-generated field indicating the date that this set of label information is submitted to EPA.	FuelEconomyLabel Submission/ FuelEconomyLabel Details		1	1 per FE Label	D(8)	Date							
GL-176	**Release Date**	Enter the date this model type information can be released to the public.	FuelEconomyLabel Submission/ FuelEconomyLabel Details	ReleaseDate	1	1 per FE Label		Date (YYYYMMDD)			[1-2]{1} [0-9]{3} [0-1]{1} [0-9]{1} [0-3]{1} [0-9]{1}				
		Car Line Info (Primary Key for a Carline is "Model Yr + Carline Manufacturer Code + Division Code + Carline Code")													
GL-10	**Carline Manufacturer Code**	Enter the carline manufacturer code for this FE Label. The unique combination of model year, carline manufacturer code, division code and carline code must exist in a certified test group.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ CarlineDetails	EPAManufacturerCode	1	1 per FE Label	A(3)	String	3	3	[A-Z0-9]{3}				
GL-11	**Division Code**	Enter the division code for this FE Label. The unique combination of model year, carline manufacturer code, division code and carline code must exist in a certified test group.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ CarlineDetails	ManufacturerDivisionCode	1	1 per FE Label	N(2)	Integer	1	2				1	99

		Description	XML Path	XML Element	Min	Cardinality	Format	Type	Min Len	Max Len	Pattern		Min	Max
GL-12	**Carline Code**	Enter the carline code for this FE Label. The unique combination of model year, carline manufacturer code, division code and carline code must exist in a certified test group.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ CarlineDetails	CarlineCode	1	1 per FE Label	N(3)	Integer	1	3			1	999
GL-13.5	**Test Group**	Enter the applicable test group name which, a long with Engine Configuration Number, identifies the Hybrid/Combustion Engine Description (TG-26 through TG-35) and Engine Configuration information (TG-38 through TG-52) to be used for this FE Label.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ BasicEngineDetails	TestGroupName	1	1 per FE Label	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}([\\.][A-Z0-9]{1,6})?			
GL-13.5.1	**Drive Source**	Enter the applicable value for the drive source for this test group. Select 'E' for fuel cell electric vehicle.	NA	NA	1	1..2 per FE Label	A(1)	Enumeration						
GL-13.5.2	**Hybrid Indicator**	Are the vehicles in this test group hybrid electric vehicles (HEVs) as defined in 40 CFR 86.1803-01?	NA	NA	1	1 per FE Label	A(1)	Enumeration						
GL-13.5.3	**Fuel(s)**	Enter all applicable fuels for this test group.	TestVehicleInformat ionSubmission/ TestVehicleInformat ionDetails/ VehicleConfiguratio nDetails	Fuel1Identifier	1	1..n per Drive Source per FE Label	A(3)	Enumeration						
GL-13.5.4	**Basic fuel metering system**	Enter the applicable fuel metering system type for this test group.		PrimaryFuelMeteringSy stemIdentifier	0	Once per Fuel per FE Label	A(4)	Enumeration						
GL-13.5.5	**Lean Burn Strategy Indicator**	Does the fuel metering system employ lean burn strategy (e.g. to significantly improve the fuel economy of the vehicle)?	NA	NA	0	Once per Selected Fuel (TG-7.3) per FE Label	A(3)	Enumeration						
GL-13.5.6	**Multiple Fuel Storage- Separate or Together**	If multiple fuels are selected for Fuel(s), are the fuels stored separately or together?	NA	NA	0	1 per FE Label	A(8)	Enumeration						
GL-13.5.7	**Multiple Fuel Combustion- Separate or Together**	If multiple fuels are selected for Fuel(s), are the fuels combusted separately or together?	NA	NA	0	1 per FE Label	A(8)	Enumeration						
GL-13.5.8	**Fuel Cell Indicator**	Are vehicles within this test group equipped with a Fuel Cell?	NA	NA	0	1 per FE Label	A(1)	Enumeration						
GL-13.5.9	**Rechargeable Energy Storage System Indicator**	Are vehicles within this test group equipped with a rechargeable energy storage system?	NA	NA	0	1 per FE Label	A(1)	Enumeration						

				Verify Light-Duty Data Requirements										
GL-13.5.12	**Off-board Charge Capable Indicator**	Select "Yes" if vehicles within this test group are equipped with an electric motor that is capable of being charged off-board the vehicle, otherwise select "No".	NA	NA	0	1 per FE Label	A(1)	Enumeration						
	Basic Engine Info - Hybrid/Combustion Description					0..1								
GL-16	**Hybrid Type**	Enter the applicable type of Hybrid system for this Basic Engine for this FE Label.		HybridTypeIdentifier	0	1 per FE Label	A(2)	Enumeration						
GL-17	**Hybrid Type Description, if Other**	Enter a description of the hybrid system for this Basic Engine for this FE Label if "Other" (OT) is selected for "Hybrid Type".		HybridTypeOtherText	0	1 per FE Label	A(100)	String	1	100				
GL-18	**Engine Type**	Enter the applicable engine type for this Basic Engine for this FE Label.		EngineTypeIdentifier	0	1 per FE Label	A(4)	Enumeration						
GL-19	**Engine Type Description, If Other**	Enter a description of the engine for this Basic Engine for this FE Label for gas turbine, rankine, sterling or "other" engine types.		EngineTypeOtherText	0	1 per FE Label	A(1000)	String	1	1000				
GL-20	**Engine Block Arrangement**	Enter the applicable engine block arrangement for this Basic Engine for this FE Label.		EngineBlockArrangementIdentifier	0	1 per FE Label	A(2)	Enumeration						
GL-21	**Engine Block Arrangement Description, if Other**	Enter a description of the engine block arrangment for this Basic Engine for this FE Label if "other" is selected.		EngineBlockArrangementOtherText	0	1 per FE Label	A(500)	String	1	500				
GL-22	**Number of Cylinders/Rotors**	Enter the number of cylinders or rotors for this Basic Engine for this FE Label.		CylindersOrRotorsCount	0	1 per FE Label	N(2)	Integer					0	20
GL-22.1	**Camless Valvetrain Indicator**	Do the engines in this test group use something other than a camshaft to accuate the intake and exhaust valves?	NA	NA	1	Once per FE Label	A(3)	Enumeration						
GL-22.2	**Oil Viscosity/Classification**	Enter oil Viscosity and classification recommended for use in summer (e.g.100deg F ambient temp) for engines in this test group (e.g. 0W20 GF 4, 5W20 GF3, etc)	NA	NA	1	Once per FE Label	A(25)	String	1	25				
GL-25	**Engine Configuration Number**	Enter the applicable Engine Configuration Number which, along with Test Group Name, identifies the Engine Configuration information (TG-38 through TG-52) to be used for this FE Label.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ BasicEngineDetails	EngineConfigurationNumber	0	1 per FE Label	N(2)	Integer					1	99
GL-26	**Engine Displacement (liters)**	The engine displacement for this FE Label. (In Liters)		EngineDisplacementValue	0	1 per FE Label	N(5,3)	Decimal				5	3	0.001	99.999

ID	Name	Description		Element			Length	Type						Min	Max
GL-27	Cylinder Deactivation	Does this FE Label utilize cylinder deactivation technologies? This is sometimes referred to as variable displacement.		CylinderDeactivationIndicator	0	1 per FE Label	A(1)	Enumeration							
GL-28	Cylinder Deactivation Description	The description of the cylinder deactivation technology utilized on this FE Label.		CylinderDeactivationDescriptionText	0	1 per FE Label	A(1000)	String	1	1000					
GL-29	Variable Valve Timing	Does this FE Label utilize variable valve timing technology?		VariableValveTimingIndicator	0	1 per FE Label	A(1)	Enumeration							
GL-30	Variable Valve Timing System Description	The description of the variable valve timing technology utilized on this FE Label.		VariableValveTimingDescriptionText	0	1 per FE Label	A(1000)	String	1	1000					
GL-31	Variable Valve Lift?	Is this FE Label equipped with a variable valve lift mechanism?		VariableValveLiftIndicator	0	1 per FE Label	A(1)	Enumeration							
GL-32	Variable Valve Lift System Description	The description of the variable valve lift mechanism utilized on this FE Label.		VariableValveLiftDescriptionText	0	1 per FE Label	A(1000)	String	1	1000					
GL-33	Number of Inlet Valves Per Cylinder	The number of inlet valves per cylinder for this FE Label. 0 if not applicable.		InletValvesPerCylinderCount	0	1 per FE Label	N(1)	Integer						0	9
GL-34	Number of exhaust Valves Per Cylinder	The number of exhaust valves per cylinder for this FE Label. 0 if not applicable.		ExhaustValvesPerCylinderCount	0	1 per FE Label	N(1)	Integer						0	9
GL-35	Air Aspiration Method	The applicable air aspiration methods for this FE Label.		AirAspirationMethodIdentifier	0	1 per FE Label	A(2)	Enumeration							
GL-36	Number of Air Aspiration Devices	The number of air aspiration devices for this FE Label.		AirAspirationDeviceCount	0	1 per FE Label	N(2)	Integer						0	99
GL-37	Air Aspiration Device Configuration	The air aspiration device configuration for this FE Label.		AirAspirationConfigurationIdentifier	0	1 per FE Label	A(2)	Enumeration							
GL-38	Air Aspiration Method, if Other	The description of the air aspiration method for this FE Label if "other" is selected.		AirAspirationMethodOtherText	0	1 per FE Label	A(30)	String	1	30					
GL-39	Charge Air Cooler Type	The applicable charge air cooler type for this FE Label.		ChargeAirCoolerIdentifier	0	1 per FE Label	A(1)	Enumeration							
GL-40	Engine Configuration Comments	Additional comments about this FE Label.		ManufacturerCommentText	0	1 per FE Label	A(1000)	String	1	1000					
	Hybrid, Electric Vehicle and Fuel Cell Information														
GL-41	Rechargeable Energy Storage System	Enter the applicable type of energy storage device for this test group.		EnergyStorageDeviceIdentifier	0	1 per FE Label	A(2)	Enumeration							
GL-42	Rechargeable Energy Storage Device if Other	Enter a description of the energy storage device for this test group if "other" selected.		EnergyStorageDeviceOtherText	0	1 per FE Label	A(30)	String	1	30					

ID	Name	Description		Data Element		Occurrence	Format	Type							
GL-43	Battery Type	The applicable type of battery for this FE Label.		BatteryTypeIdentifier	0	1 per FE Label	A(4)	Enumeration							
GL-44	Battery Type if Other	The description of the battery type for this FE Label if "other" selected.		BatteryTypeOtherText	0	1 per FE Label	A(30)	String	1	30					
GL-45	Number of Batteries	The total number of batteries for this FE Label. Does not include starter batteries.		BatteryCount	0	1 per FE Label	N(3)	Integer						0	999
GL-46	Total Voltage of Battery Pack(s)	The total voltage of all battery pack(s) for this FE Label. Does not include starter batteries. (in Volts)		BatteryTotalVoltageMeasure	0	1 per FE Label	N(3)	Integer						1	999
GL-47	Battery Energy Capacity	The battery energy capacity for this FE Label. Does not include starter batteries. (in Ah)		BatteryEnergyCapacityMeasure	0	1 per FE Label	N(4,2)	Decimal				4	2	0.01	99.99
GL-48	Battery Specific Energy	The battery specific energy for this FE Label. Does not include starter batteries. (in Whr/kg)		BatterySpecificEnergyMeasure	0	1 per FE Label	N(5,1)	Decimal				5	1	0.1	9999.9
GL-49	Battery Charger Type	The applicable type of battery charger type for this FE Label.		BatteryChargerTypeIdentifier	0	1 per FE Label	A(3)	Enumeration							
GL-50	Number of Capacitors	The number of capacitors for this FE Label.		CapacitorCount	0	1 per FE Label	N(2)	Integer						0	99
GL-51	Capacitor Rating In Farads	The rating of each capacitor number (in farads).		CapacitorRatingValue	0	1..n per FE Label	N(4,2)	Decimal				4	2	0.01	99.99
GL-52	Capacitor Comments	Any additional comments about the capacitor(s) for this FE Label.		CapacitorCommentText	0	1 per FE Label	A(100)	String	1	100					
GL-53	Hydraulic System Description	The description of the hydraulic system for this FE Label.		HydraulicSystemDescriptionText	0	1 per FE Label	A(1000)	String	1	1000					
GL-54	Regenerative Braking Type	The applicable type of regenerative braking technology utilized on this FE Label.		BrakingTypeIdentifier	1	1 per FE Label	A(3)	Enumeration							
GL-55	Regenerative Braking Type if "Other"	The description of the type of regenerative braking technology utilized on this FE Label if "other" is selected.		BrakingTypeOtherText	0	1 per FE Label	A(1000)	String							
GL-56	Regenerative Braking Source	The applicable source of regenerative braking for this FE Label.		BrakingSourceIdentifier	0	1 per FE Label	A(1)	Enumeration							
GL-57	Driver Controlled Regenerative Braking	Does this FE Label have driver-controlled regenerative braking?		DriverControlledBrakingIndicator	0	1 per FE Label	A(1)	Enumeration							
GL-58	Number of Drive Motor/Generator(s)	The number of drive motor/generator(s) for this FE Label.		MotorGeneratorCount	0	1 per FE Label	N(1)	Integer						0	9

ID	Field Name	Description	Path	XML Element	Req	Cardinality	Format	Type	Min	Max	MinVal	MaxVal
GL-59	Motor/Generator Type	The applicable type of motor/generator for this FE Label.		GeneratorTypeIdentifier	0	1..n per FE Label	A(4)	Enumeration				
GL-60	Motor/Generator Type if Other	The description of the type of motor/generator for this FE Label if other is selected.		GeneratorTypeOtherText	0	1..n per FE Label	A(30)	String	1	30		
GL-61	Rated Motor/Generator Power	The rated power of the motor/generator for this FE Label. (in kWatt)		GeneratorRatedPowerValue	0	1..n per FE Label	N(3)	Integer			1	999
GL-62	Fuel Cell Description	The description of the fuel cell for this FE Label.		FuelCellDescriptionText	0	1 per FE Label	A(1000)	String	1	1000		
GL-63	Fuel Cell On-Board H2 Storage Capacity	The on-board hydrogen storage capacity for this FE Label. (in kg)		FuelCellOnboardHydrogenStorageMeasure	0	1 per FE Label	N(5,2)	Decimal	5	2	0.01	999.99
GL-64	Usable H2 Fill Capacity	The usable hydrogen fill capacity for this FE Label. (in kg)		UsableHydrogenFillCapacityMeasure	0	1 per FE Label	N(5,2)	Decimal	5	2	0.01	999.99
GL-65	HEV EV Comments	Any additional comments for this electric vehicle or hybrid-electric vehicle.		ManufacturerCommentText	0	1 per FE Label	A(1000)	String	1	1000		
	Transmission Class Information											
GL-67	Transmission Type	Enter the applicable transmission type for this FE Label.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	TransmissionTypeIdentifier	1	1 per FE Label	A(3)	Enumeration				
GL-68	Transmission Type If Other	Enter a description of the transmission type if "other" is selected.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	TransmissionTypeOtherText	0	1 per FE Label	A(30)	Normalized string	1	30		
GL-69	Transmission Lockup	Does this FE Label have a transmission torque converter lock-up mechanism?	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	TransmissionLockupIndicator	1	1 per FE Label	A(1)	Enumeration				
GL-70	Transmission Creeper Gear	Does this FE Label have any transmission creeper gear(s)? Creeper gear is defined as having a gear ratio greater than 5.000.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	TransmissionCreeperGearIndicator	1	1 per FE Label	A(1)	Enumeration				
GL-71	Total Number of Transmission Gears	Enter the total number of forward transmission gears for this FE Label. Enter "1" for CVT or direct drive.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	TransmissionGearCount	1	1 per FE Label	N(2)	Integer			1	99

			FuelEconomyLabel Submission/ FuelEconomyLabel Details/												
GL-72	**Drive system**	Enter the applicable drive system for this FE Label.	TransmissionClass Details	TestDriveCode	1	1 per FE Label	A(1)	Enumeration							
GL-73	**Transmission Overdrive**	Enter the applicable transmission overdrive system for this FE Label.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	TransmissionOverdriveIdentifier	1	1 per FE Label	A(1)	Enumeration							
GL-74	**Shift Indicator Light**	Is a shift indicator light utilized for this FE Label? 'Yes' can only be selected for manual or automated manual transmissions.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	ShiftIndicatorLightUsageIndicator	1	1 per FE Label	A(1)	Enumeration							
GL-75	**Stop/Start Indicator**	Is an engine management system (i.e. Stop/Start engine device) utilized for this FE Label? (See A/C 83A, page 4.)	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	EngineManagementSystemIdentifier	1	1 per FE Label	A(1)	Enumeration							
GL-76	**Number of Transmission Modes**	Enter the number of transmission modes for this FE Label. (See A/C 83A, page 4.)	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	TransmissionModeNumberIdentifier	1	1 per FE Label	A(1)	Enumeration							
GL-77	**Variable lockup point**	Enter the applicable variable lockup point for this FE Label. (See A/C 83A, page 4.)	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	VariableLockupPointIdentifier	1	1 per FE Label	A(1)	Enumeration							
GL-78	**Declutching/Free Wheeling**	Is declutching or freewheeling utilized for this FE Label? (See A/C 83A, page 4.)	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	DeclutchingFreeWheelingIdentifier	1	1 per FE Label	A(1)	Enumeration							

GL-78.1	**Transmission as listed in the FE Guide**	Verify will determine the value for Transmission as listed in the Fuel Economy Guide from the values entered for Transmission Type (GL-67) and Number of Transmission Gears (GL-71).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ EPAGeneratedFuel EconomyLabelDetai ls	TransmissionAsListedI nFEGuide	1	1 per FE Label	A(12)	Enumeration					
GL-78.2	**Model Type Descriptor**	Enter a description of this Model Type to distinguish between otherwise identical model types that have different fuel economy label values. Use of the Model Type Descriptor is subject to EPA approval. This was formerly referred to as Engine Block Descriptor.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ TransmissionClass Details	ModelTypeDescriptionT ext	0	1 per FE Label	A(30)	String	1	30			
	FE Label Information												
GL-79	**Fuel Economy Label Calculation Approach**	Enter the fuel economy label calculation approach for this FE Label as follows: When Drive Source (GL-14) is a combustion engine ('C') or hybrid ('H') select: 5C-DRV = Derived 5-cycle Calculation Approach for both city and highway labels 5C-VEHSPEC = Vehicle Specific 5-cycle Calculation Approach for both city and highway labels 5C-MOD = Derived 5-cycle Calculation Approach for city label but Modified 5-cycle Calculation Approach for Highway label When the Drive Source (GL-14) is an electric motor ('E') select: EV = Electric Vehicle 2-cycle label EV-5C = Electric Vehicle 5-cycle label PHEV = Plug-in Hybrid Label	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	LabelCalculationAppro achIdentifier	1	1 per FE Label	A(10)	Enumeration					
GL-79.1	**5 Cycle Hybrid Fuel Economy Label Calculation Approach**	Select the applicable 5-cycle hybrid fuel economy label calculation approach.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	Hybrid5CycleCalculatio nApproachIdentifier	0	1 per FE Label	A(6)						
GL-79.2	**Charge Depleting Fuel Economy Label Calculation Approach**	Select the applicable value for the charge depleting fuel economy label calculation approach.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	ChargeDepletingLabel CalculationApproachId entifier	0	1 per FE Label	A(5)						
GL-79.3	**Charge Sustaining Fuel Economy Label Calculation Approach**	Select the applicable value for the charge sustaining fuel economy label calculation approach.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	ChargeSustainingLabel CalculationApproachId entifier	0	1 per FE Label	A(5)						

GL-200	**Litmus Bypass Indicator** ~~MDPV-Only or ICI Indicator~~	Enter "Y" (Yes) if all models for the Carline name (CL-6) are MDPVs [as determined by the Model Year (GL-3), Carline Manufacturer Code (GL-10), Division Code (GL-11), and Carline Code (GL-12)] or if this carline is being submitted by an Independent Commercial Importer (ICI), **or if EPA has approved the bypass of Verify Litmus Test calculations (e.g. temporary Tier 3/LEV-III E10 workaround) for this FE Label**. Otherwise enter "N" (No).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	MediumDutyPassenger VehicleOnlyIndepende ntCommercialImporterI ndicator	1	1 per FE Label	A(1)	Enumeration					
GL-82	**Model Type Suppression Indicator**	EPA Only:

Enter whether this Model Type should be suppressed from the Fuel Economy Guide. | | | 0 | 1 per FE Label | A(1) | Enumeration | | | | | |
GL-83	**FE Label Self-Approval Date**	Enter the self-approval date determined by a manufacturer for this FE Label.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	LabelSelfApprovalDate	1	1 per FE Label	D(8)	Date			[1-2]{1} [0-9]{3} [0-1]{1} [0-9]{1} [0-3]{1} [0-9]{1}		
GL-84	**Unique Label**	Is this a unique label?	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	UniqueLabelIndicator	0	1 per FE Label	A(1)	Enumeration					
GL-106.1	**Certification Region Code**	Enter all applicable certification region codes for this FE Label. This was previously referred to as 'sales area' in CFEIS.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails	CertificationRegionCod e	1	1..2 per FE Label (1 for each certification region code)	A(2)	Enumeration					
GL-106.2	**Actual Model Sales Area**	Select all applicable US states and territories where this vehicle model is offered for sale.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails	ActualModelSalesAreaI dentifier	0	1..n per FE Label	A(2)	Enumeration					
GL-107	**Commerce Introduction Date**	Enter the date on which this Model Type will be entered into commerce.			1	1 per FE Label	D(8)	Date					

GL-85	**Mfr Voluntary Lower FE or Higher Energy Consumption Label Indicator**	Are you voluntarily using a lower mpg value or higher energy consumption value for city or highway than was calculated for this FE Label?	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	VoluntaryLowerFuelEc onomyLabelIndicator	1	1 per FE Label	A(1)	Enumeration									
GL-203	**Manufacturer-Calculated Fuel Economy Rating**	Enter the manufacturer-determined fuel economy (1-10) rating required by 40 CFR 600.311-12(d) and 600.302(e), ref CISD-11-11, Aug 8, 2011. Where 1 is worst and 10 is best. For FFVs provide the Fuel Economy Rating for the conventional fuel (i.e., Gasoline or Diesel).

Refer to CISD-11-11 guidance letter for the FE Rating look-up table. FFVs will only use Gasoline or Diesel for the FE Rating. If more than 1 Fuel Usage Value is present, then only Gasoline or Diesel FE Ratings are assigned. A guidance letter with the new model year FE Rating look-up table will be issued early each calendar year. If a FE Label is submitted prior to the new model year guidance letter, use the previous model year's look-up table. | FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails | FuelEconomyRatingNu mber | 0 | 1 per FE Label | N(2) | Enumeration | | | | | | | 1 | 10 |
| GL-204 | **EPA-Calculated Fuel Economy Rating** | Verify calculated Fuel Economy (1-10) Rating.

Do not perform calculations for EV and PHEV model types (where one of the fuel usage values (GL-89) = EL (electricity). | FuelEconomyLabel Submission/ FuelEconomyLabel Details/ EPAGeneratedFuel EconomyLabelDetai ls | EPAFuelEconomyRatin gNumber | 0 | 1 per FE Label | N(2) | Enumeration | | | | | | | 1 | 10 |
| GL-205 | **Manufacturer-Calculated GHG Rating** | Enter the manufacturer-determined greenhouse gas (1-10) rating required by 40 CFR 600.311-12(d) and 600.302(e), ref CISD-11-11, Aug 8, 2011. FFVs will only use Gasoline for the GHG Rating. | FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails | GreenhouseGasRating Number | 0 | 1 per FE Label | N(2) | Enumeration | | | | | | | 1 | 10 |

GL-206	**EPA-Calculated GHG Rating**	Verify Calculated GHG (1-10) rating Do not perform calculations for PHEV model types (ie, where there are more than one fuel usage value (GL-89) and one of those values = "EL"). This calculation should be done for EVs.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ EPAGeneratedFuel EconomyLabelDetai ls	EPAGreenhouseGasR atingNumber	0	1 per FE Label	N(2)	Enumeration					1	10
GL-207	**Unique Carline/Subconfiguration Test Group(s)**	Enter all unique subconfiguration test groups that will be used to determine Smog Ratings for this FE Label. All of the subconfiguration test groups that have the same Carline as the Model Type for this FE Label must be provided.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ LabelDetails/ SubConfigurationS mogRatingDetails	TestGroupName	0	1..n per FE Label	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9] {1}[A-Z0-9] {4,11} ([\.][A-Z0-9] {1,6})?			
GL-208	**Manufacturer-Calculated Smog Rating**	Enter the manufacturer-determined smog (1-10) rating required by 40 CFR 600.311-12(g) and 600.302(e), ref CISD-11-11, Aug 8, 2011.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ LabelDetails/ SubConfigurationS mogRatingDetails	ManufacturerCalculate dSmogRatingNumber	0	1..n per FE Label (1 per unique Carline/Subconfiguration Test Group (GL-207) for the same Model Type Carline)	N(2)	Enumeration					1	10
GL-209	**EPA-Calculated Smog Rating**	Verify-calculated smog rating (1-10)	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ LabelDetails/ SubConfigurationS mogRatingDetails	EPACalculatedSmogR atingNumber	0	1..n per FE Label (1 per unique Carline/Subconfiguration Test Group (GL-207) for the same Model Type Carline)	N(2)	Enumeration					1	10
GL-210	**Manufacturer-Calculated Amount Saved Over 5 Years**	Enter the amount saved in fuel costs over 5 years compared to the average new vehicle as required by 40 CFR 600.311-12(f), ref CISD-11-11, Aug 8, 2011.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	AmountSavedOverFive YearsNumber	0	1 per FE Label	N(5)	Integer					0	99,999

GL-211	**EPA-Calculated Amount Saved Over 5 Years**	The Verify-calculated amount saved in fuel costs over 5 years compared to the average new vehicle as required by 40 CFR 600.311-12(f), ref CISD-11-11, Aug 8, 2011. Do not perform calculations for EV and PHEV model types (where one of the fuel usage values (GL-89) = EL (electricity).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ EPAGeneratedFuel EconomyLabelDetai ls	EPAAmountSavedOver FiveYearsNumber	0	1 per FE Label	N(5)	Integer							0	99,999
GL-212	**Manufacturer-Calculated Increased Amount Spent Over 5 Years**	Enter the increased amount that will be spent in fuel costs over 5 years compared to the average new vehicle as required by 40 CFR 600.311-12(f), ref CISD-11-11, Aug 8, 2011.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	IncreasedAmountSpent OverFiveYearsNumber	0	1 per FE Label	N(6)	Integer							0	999,999
GL-213	**EPA-Calculated Increased Amount Spent Over 5 Years**	The Verify-calculated increased amount that will be spent in fuel costs over 5 years compared to the average new vehicle as required by 40 CFR 600.311-12(f), ref CISD-11-11, Aug 8, 2011. Do not perform calculations for EV and PHEV model types (where one of the fuel usage values (GL-89) = EL (electricity).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ EPAGeneratedFuel EconomyLabelDetai ls	EPAIncreasedAmountS pentOverFiveYearsNu mber	0	1 per FE Label	N(6)	Integer							0	999,999
GL-274	**Discrepancy Indicator between Manufacturer and EPA-Calculated Label Values**	Verify will assign "Yes" if there are any discrepancies between the manufacturer and EPA-calculated Label values that will be printed on the Label.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ EPAGeneratedFuel EconomyLabelDetai ls	DiscrepancyBetweenM anufacturerAndEPACal culatedLabelValuesIndi cator	1	1 per FE Label	A(1)	Enumeration								
GL-86	**Police or Emergency Vehicle Only**	Does this FE Label only include police or emergency vehicles?	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	PoliceEmergencyVehicl eOnlyIndicator	1	1 per FE Label	A(1)	Enumeration								

GL-87	**Label Recalculation**	Are you submitting recalculated FE Label values due to a Running Change?	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	LabelRecalculationIndic ator	0	1 per FE Label	A(1)	Enumeration						
GL-88	**Relabel**	Did the label recalculation generate either higher or lower mpg values in comparison with the original label values? (note: This is a combination of ""new Label indicator" and "Relabel Option" in CFEIS G1)	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	RelabelChangeIdentifie r	0	1 per FE Label	A(2)	Enumeration						
GL-277	**EPA FE Label Model Type Calculation Complete Indicator**	EPA FE Label Model Type Calculation Complete Indicator	NA	NA	0	1 per FE Label	A(1)	Enumeration						
GL-278	**EPA FE Label Model Type Calculation Failure Reason**	EPA FE Label Model Type Calculation Failure Reason	NA	NA	0	1 per FE Label	A(1000)	String	1	1000				
	Fuel Usage and Fuel Economy Values													
GL-89	**Fuel Usage**	Enter the applicable fuel used for this FE Label.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails	FuelUsageIdentifier	1	1..n per FE Label	A(3)	Enumeration						

ID	Field Name	Description	XML Path	XML Element		Occurrence	Type								Min	Max
GL-90	**Fuel Economy Value Unit**	Enter the applicable unit of measure for fuel economy values based on this Fuel Usage value. Select "MPG" when submitting MPG-equivalent fuel economy values.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails	FuelEconomyValueUnit Identifier	1	1 per Fuel Usage Value per FE Label except 1..n per Fuel Usage Value per FE Label when Fuel Usage = "EL"	A(8)			3	8					
GL-81	**Manufacturer-Calculated Annual Fuel Cost**	Enter the annual fuel cost for for each fuel usage value for this FE Label (even though the alt fuel value for FFVs and dual-fuel vehicles is not required to be on the FE Label window sticker) using 15,000 miles of driving per year. This should be rounded to the nearest $50 for model years greater than or equal to 2013.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails	AnnualFuelCostNumbe r	1	1 per Fuel Usage Value per FE Label	N(5)								1	99999
GL-81.1	**EPA-Calculated Annual Fuel Cost**	The Verify calculated annual fuel cost for this FE Label using 15,000 miles of driving per year for model year 2013 and later. This will be rounded to the nearest $50. Do not perform calculations for 2012 and earlier model years. Do not perform calculations for EV and PHEV model types (where one of the fuel usage values (GL-89) = EL (electricity).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details	AnnualFuelCostNumbe r	1	1 per Fuel Usage Value per FE Label	N(5)								1	99999
GL-91	**Manufacturer-Calculated Unrounded Unadjusted Model Type City FE Value**	Provide the manufacturer calculated unrounded/unadjusted Model Type city fuel economy value (not 5-cycle calculated values).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerUnrou ndedUnadjustedMo delTypeDetails	CityFuelEconomy4Valu e	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal					7	4	0	999.9999

GL-92	**Manufacturer-Calculated Unrounded Unadjusted Model Type Highway FE Value**	Provide the manufacturer calculated unrounded/unadjusted Model Type highway fuel economy value (not 5-cycle calculated values).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerUnrou ndedUnadjustedMo delTypeDetails	HighwayFuelEconomy4 Value	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal				7	4	0	999.9999
GL-93	**Manufacturer-Calculated Unrounded Unadjusted Model Type Combined FE Value**	Provide the manufacturer calculated unrounded/unadjusted Model Type combined fuel economy value (not 5-cycle calculated values).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerUnrou ndedUnadjustedMo delTypeDetails	CombinedFuelEconom y4Value	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal				7	4	0	999.9999
GL-223	**EPA-Calculated Unrounded Unadjusted Model Type City FE Value- 4 Decimal**	The EPA-calculated unrounded/unadjusted Model Type city fuel economy value (not 5-cycle calculated values).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFuelEconomyV alueUnitDetails/ EPAUnroundedUna djustedModelTypeD etails	CityFuelEconomy4Valu e	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal				7	4	0	999.9999
GL-224	**EPA-Calculated Unrounded Unadjusted Model Type Highway FE Value- 4 Decimal**	The EPA-calculated unrounded/unadjusted Model Type highway fuel economy value (not 5-cycle calculated values).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFuelEconomyV alueUnitDetails/ EPAUnroundedUna djustedModelTypeD etails	HighwayFuelEconomy4 Value	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal				7	4	0	999.9999
GL-225	**EPA-Calculated Unrounded Unadjusted Model Type Combined FE Value- 4 Decimal**	The EPA-calculated unrounded/unadjusted Model Type combined fuel economy value (not 5-cycle calculated values).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFuelEconomyV alueUnitDetails/ EPAUnroundedUna djustedModelTypeD etails	CombinedFuelEconom y4Value	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal				7	4	0	999.9999

GL-268	**Manufacturer-Calculated Unrounded Unadjusted Model Type City CO2 Value- 1 Decimal**	Enter the manufacturer-calculated Unrounded Unadjusted Model Type City CO2 Value 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerUnrou ndedUnadjustedMo delTypeCarbonDioxi deDetails	CityCarbonDioxide1Val ue	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal				5	1	0	9999.9
GL-269	**Manufacturer-Calculated Unrounded Unadjusted Model Type Highway CO2 Value- 1 Decimal**	Enter the manufacturer-calculated Unrounded Unadjusted Model Type Highway CO2 Value 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerUnrou ndedUnadjustedMo delTypeCarbonDioxi deDetails	HighwayCarbonDioxide 1Value	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal				5	1	0	9999.9
GL-270	**Manufacturer-Calculated Unrounded Unadjusted Model Type Combined CO2 Value- 1 Decimal**	Enter the manufacturer-calculated Unrounded Unadjusted Model Type Combined CO2 Value 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerUnrou ndedUnadjustedMo delTypeCarbonDioxi deDetails	CombinedCarbonDioxi de1Value	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal				5	1	0	9999.9
GL-226	**EPA-Calculated Unrounded Unadjusted Model Type City CO2 Value- 1 Decimal**	The EPA-calculated Unrounded Unadjusted Model Type City CO2 Value with 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAUnroundedUna djustedModelTypeC arbonDioxideDetails	CityCarbonDioxide1Val ue	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal				5	1	0	9999.9
GL-227	**EPA-Calculated Unrounded Unadjusted Model Type Highway CO2 Value- 1 Decimal**	The EPA-calculated Unrounded Unadjusted Model Type Highway CO2 Value with 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAUnroundedUna djustedModelTypeC arbonDioxideDetails	HighwayCarbonDioxide 1Value	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal				5	1	0	9999.9
GL-228	**EPA-Calculated Unrounded Unadjusted Model Type Combined CO2 Value- 1 Decimal**	The EPA-calculated Unrounded Unadjusted Model Type Combined CO2 Value with 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAUnroundedUna djustedModelTypeC arbonDioxideDetails	CombinedCarbonDioxi de1Value	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal				5	1	0	9999.9

ID	Name	Description	Path	Element	Occurrence	Condition	Type	Format	Length	Decimal	Min	Max
GL-94	**Manufacturer-Calculated 5-Cycle Unrounded Adjusted Model Type City FE Value**	If the vehicle-specific 5-cycle label calculation approach is used to generate the FE Label, provide the manufacturer-calculated unrounded adjusted Model Type city fuel economy value. This value has been adjusted using the 5-cycle method for the real-world driving shortfall, but has not been rounded to the label-specified digits.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerFiveCy cleUnroundedAdjust edModelTypeDetail s	CityFuelEconomy4Valu e	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal	7	4	0	999.9999
GL-95	**Manufacturer-Calculated 5-Cycle Unrounded Adjusted Model Type Highway FE Value**	If the vehicle-specific 5-cycle label calculation approach is used to generate the FE Label, provide the manufacturer-calculated unrounded adjusted Model Type highway fuel economy value. This value has been adjusted using the 5-cycle method for the real-world driving shortfall, but has not been rounded to the label-specified digits.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerFiveCy cleUnroundedAdjust edModelTypeDetail s	HighwayFuelEconomy4 Value	1	1 per Fuel Usage except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal	7	4	0	999.9999
GL-96	**Manufacturer-Calculated 5-Cycle Unrounded Adjusted Model Type Combined FE Value**	If the vehicle-specific 5-cycle label calculation approach is used to generate the FE Label, provide the manufacturer-calculated unrounded adjusted Model Type combined fuel economy value. This value has been adjusted using the 5-cycle method for the real-world driving shortfall, but has not been rounded to the label-specified digits.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerFiveCy cleUnroundedAdjust edModelTypeDetail s	CombinedFuelEconom y4Value	1	1 per Fuel Usage except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal	7	4	0	999.9999
GL-229	**EPA-Calculated 5-Cycle Unrounded Adjusted Model Type City FE Value- 4 Decimal**	If the vehicle-specific 5-cycle label calculation approach is used to generate the FE Label, this is the EPA-calculated unrounded adjusted Model Type city fuel economy value. This value has been adjusted using the 5-cycle method for the real-world driving shortfall, but has not been rounded to the label-specified digits.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFuelEconomyV alueUnitDetails/ EPAFiveCycleUnro undedAdjustedMod elTypeDetails	CityFuelEconomy4Valu e	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal	7	4	0	999.9999
GL-230	**EPA-Calculated 5-Cycle Unrounded Adjusted Model Type Highway FE Value- 4 Decimal**	If the vehicle-specific 5-cycle label calculation approach is used to generate the FE Label, this is the EPA-calculated unrounded adjusted Model Type highway fuel economy value. This value has been adjusted using the 5-cycle method for the real-world driving shortfall, but has not been rounded to the label-specified digits.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFuelEconomyV alueUnitDetails/ EPAFiveCycleUnro undedAdjustedMod elTypeDetails	HighwayFuelEconomy4 Value	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal	7	4	0	999.9999

ID	Name	Description	XML Path	Element	Decimals	Occurrence	Format	Type	Length	Dec	Min	Max
GL-231	**EPA-Calculated 5-Cycle Unrounded Adjusted Model Type Combined FE Value- 4 Decimal**	If the vehicle-specific 5-cycle label calculation approach is used to generate the FE Label, this is the EPA-calculated unrounded adjusted Model Type combined fuel economy value. This value has been adjusted using the 5-cycle method for the real-world driving shortfall, but has not been rounded to the label-specified digits.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFuelEconomyV alueUnitDetails/ EPAFiveCycleUnro undedAdjustedMod elTypeDetails	CombinedFuelEconom y4Value	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(7,4)	Decimal	7	4	0	999.9999
GL-271	**Manufacturer-Calculated 5-Cycle Unrounded Adjusted Model Type City CO2 Value- 1 Decimal**	Enter the Manufacturer-calculated 5-Cycle Unrounded Adjusted Model Type City CO2 Value with 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerFiveCy cleUnroundedAdjust edModelTypeCarbo nDioxideDetails	CityCarbonDioxide1Val ue	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal	5	1	0	9999.9
GL-272	**Manufacturer-Calculated 5-Cycle Unrounded Adjusted Model Type Highway CO2 Value- 1 Decimal**	Enter the Manufacturer-calculated 5-Cycle Unrounded Adjusted Model Type Highway CO2 Value with 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerFiveCy cleUnroundedAdjust edModelTypeCarbo nDioxideDetails	HighwayCarbonDioxide 1Value	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal	5	1	0	9999.9
GL-273	**Manufacturer-Calculated 5-Cycle Unrounded Adjusted Model Type Combined CO2 Value- 1 Decimal**	Enter the Manufacturer-calculated 5-Cycle Unrounded Adjusted Model Type Combined CO2 Value with 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerFiveCy cleUnroundedAdjust edModelTypeCarbo nDioxideDetails	CombinedCarbonDioxi de1Value	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal	5	1	0	9999.9
GL-232	**EPA-Calculated 5-Cycle Unrounded Adjusted Model Type City CO2 Value- 1 Decimal**	The EPA-calculated 5-Cycle Unrounded Adjusted Model Type City CO2 Value with 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFiveCycleUnro undedAdjustedMod elTypeCarbonDioxid eDetails	CityCarbonDioxide1Val ue	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal	5	1	0	9999.9
GL-233	**EPA-Calculated 5-Cycle Unrounded Adjusted Model Type Highway CO2 Value- 1 Decimal**	The EPA-calculated 5-Cycle Unrounded Adjusted Model Type Highway CO2 Value with 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFiveCycleUnro undedAdjustedMod elTypeCarbonDioxid eDetails	HighwayCarbonDioxide 1Value	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal	5	1	0	9999.9

ID	Name	Description	Path	Element	Min Occurs	Occurrence Rule	Format	Data Type					Length	Precision	Min	Max
GL-234	**EPA-Calculated 5-Cycle Unrounded Adjusted Model Type Combined CO2 Value- 1 Decimal**	The EPA-calculated 5-Cycle Unrounded Adjusted Model Type Combined CO2 Value with 1 decimal of precision.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFiveCycleUnro undedAdjustedMod elTypeCarbonDioxid eDetails	CombinedCarbonDioxi de1Value	0	1 per Fuel Usage Value per FE Label	N(5,1)	Decimal					5	1	0	9999.9
GL-97	**Manufacturer-Calculated 5-Cycle Rounded Adjusted Model Type City FE Value**	Provide the manufacturer-calculated, rounded and adjusted Model Type city fuel economy value. This adjusted value reflects real world driving and has been rounded to a whole number for label purposes. This value is the Fuel Economy Guide value, unless using a Voluntary Lower Value, and is required for all Fuel Economy Label calculation approaches.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerFiveCy cleRoundedAdjuste dModelTypeDetails	CityFuelEconomyNumb er	1	1 per Fuel Usage per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer							0	999
GL-98	**Manufacturer-Calculated 5-Cycle Rounded Adjusted Model Type Highway FE Value**	Provide the manufacturer-calculated, rounded and adjusted Model Type highway fuel economy value. This adjusted value reflects real world driving and has been rounded to a whole number for label purposes. This value is the Fuel Economy Guide value, unless using a Voluntary Lower Value, and is required for all Fuel Economy Label calculation approaches.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerFiveCy cleRoundedAdjuste dModelTypeDetails	HighwayFuelEconomy Number	1	1 per Fuel Usage per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer							0	999
GL-99	**Manufacturer-Calculated 5-Cycle Rounded Adjusted Model Type Combined FE Value**	Provide the manufacturer-calculated, rounded and adjusted Model Type combined fuel economy value. This adjusted value reflects real world driving and has been rounded to a whole number for label purposes. This value is the Fuel Economy Guide value, unless using a Voluntary Lower Value, and is required for all Fuel Economy Label calculation approaches.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerFiveCy cleRoundedAdjuste dModelTypeDetails	CombinedFuelEconom yNumber	1	1 per Fuel Usage per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer							0	999
GL-237	**EPA-Calculated 5-Cycle Rounded Adjusted Model Type City FE Value**	The EPA-calculated, rounded and adjusted Model Type city fuel economy value. This adjusted value reflects real world driving and has been rounded to a whole number for label purposes. This value is the Fuel Economy Guide value, unless using a Voluntary Lower Value, and is required for all Fuel Economy Label calculation approaches.	NA	NA	1	1 per Fuel Usage per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer							0	999

GL-238	**EPA-Calculated 5-Cycle Rounded Adjusted Model Type Highway FE Value**	The EPA-calculated, rounded and adjusted Model Type highway fuel economy value. This adjusted value reflects real world driving and has been rounded to a whole number for label purposes. This value is the Fuel Economy Guide value, unless using a Voluntary Lower Value, and is required for all Fuel Economy Label calculation approaches.		NA	NA	1	1 per Fuel Usage per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer						0	999
GL-239	**EPA-Calculated 5-Cycle Rounded Adjusted Model Type Combined FE Value**	The EPA-calculated, rounded and adjusted Model Type combined fuel economy value. This adjusted value reflects real world driving and has been rounded to a whole number for label purposes. This value is the Fuel Economy Guide value, unless using a Voluntary Lower Value, and is required for all Fuel Economy Label calculation approaches.		NA	NA	1	1 per Fuel Usage per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer						0	999
GL-235	**Manufacturer-Calculated 5-Cycle Rounded Adjusted Model Type City CO2 Value**	Enter the adjusted combined model type CO2 value required by 40 CFR 600.311-12(b) and 600.302(e)(5) in units of grams per mile, rounded to the nearest whole value, ref CISD-11-11, Aug 8, 2011. If multiple fuels then only submit for gasoline or diesel. For PHEVs submit the Adjusted Combined Composite (Utilitized) CO2 value under a fuel usage type of gasoline.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerFiveCy cleRoundedAdjuste dModelTypeCarbon DioxideDetails	CityCarbonDioxideNum ber	0	1 per Fuel Usage value per FE Label	N(4)	Integer				4	0	0	9999
GL-236	**Manufacturer-Calculated 5-Cycle Rounded Adjusted Model Type Highway CO2 Value**	Enter the adjusted combined model type CO2 value required by 40 CFR 600.311-12(b) and 600.302(e)(5) in units of grams per mile, rounded to the nearest whole value, ref CISD-11-11, Aug 8, 2011. If multiple fuels then only submit for gasoline or diesel. For PHEVs submit the Adjusted Combined Composite (Utilitized) CO2 value under a fuel usage type of gasoline.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerFiveCy cleRoundedAdjuste dModelTypeCarbon DioxideDetails	HighwayCarbonDioxide Number	0	1 per Fuel Usage value per FE Label	N(4)	Integer				4	0	0	9999

ID	Data Element Name	Description	XML Path	XML Element	Min	Cardinality	Type	Format								Max
GL-201	**Manufacturer-Calculated 5-Cycle Rounded Adjusted Model Type Combined CO2 Value**	Enter the adjusted combined model type CO2 value required by 40 CFR 600.311-12(b) and 600.302(e)(5) in units of grams per mile, rounded to the nearest whole value, ref CISD-11-11, Aug 8, 2011. If multiple fuels then only submit for gasoline or diesel. For PHEVs submit the Adjusted Combined Composite (Utilitized) CO2 value under a fuel usage type of gasoline.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerFiveCy cleRoundedAdjuste dModelTypeCarbon DioxideDetails	CombinedCarbonDioxi deNumber	0	1 per Fuel Usage value per FE Label	N(4)	Integer					4	0	0	9999
GL-240	**EPA-Calculated 5-Cycle Rounded Adjusted Model Type City CO2 Value**	The EPA-Calculated 5-Cycle Rounded Adjusted Model Type City CO2 Value	NA	NA	0	1 per Fuel Usage value per FE Label	N(4)	Integer					4	0	0	9999
GL-241	**EPA-Calculated 5-Cycle Rounded Adjusted Model Type Highway CO2 Value**	The EPA-Calculated 5-Cycle Rounded Adjusted Model Type Highway CO2 Value	NA	NA	0	1 per Fuel Usage value per FE Label	N(4)	Integer					4	0	0	9999
GL-242	**EPA-Calculated 5-Cycle Rounded Adjusted Model Type Combined CO2 Value**	The EPA-Calculated 5-Cycle Rounded Adjusted Model Type Combined CO2 Value	NA	NA	0	1 per Fuel Usage value per FE Label	N(4)	Integer					4	0	0	9999
GL-100	**Manufacturer Voluntary Lower MPG or Higher Energy Consumption City Label Value**	Enter the lower city FE Label value if voluntarily using a lower MPG value or higher energy consumption value than was calculated and submitted for 'Mfr Rounded Adjusted Model Type City FE Value' (GL-97).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerVolunt aryLowerDetails	CityFuelEconomyNumb er	0	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer							0	999

GL-101	**Manufacturer Voluntary Lower MPG or Higher Energy Consumption Highway Label Value**	Enter the lower highway FE Label value if voluntarily using a lower MPG value or higher energy consumption value than was calculated and submitted for 'Mfr Rounded Adjusted Model Type Highway FE Value' (GL-98).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerVolunt aryLowerDetails	HighwayFuelEconomy Number	0	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer						0	999
GL-102	**Manufacturer Voluntary Lower MPG or Higher Energy Consumption Combined Label Value**	Enter the lower combined FE Label value if voluntarily using a lower MPG value or higher energy consumption value than was calculated and submitted for 'Mfr Rounded Adjusted Model Type Combined FE Value' (GL-99).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ FuelEconomyValue UnitDetails/ ManufacturerVolunt aryLowerDetails	CombinedFuelEconom yNumber	0	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer						0	999
GL-276	**Manufacturer Voluntary Higher CO2 Combined Label Value**	Enter the Manufacturer Voluntary Higher CO2 Combined Label Value if applicable.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/LabelDetails	ManufacturerVoluntary HigherCarbonDioxideC ombinedNumber	0	1 per FE Label	N(4)	Integer				4	0	0	9999
GL-243	**EPA-Calculated 5-Cycle Rounded Adjusted Model Type Final Label City FE Value**	The EPA-Calculated 5-Cycle Rounded Adjusted Model Type Final Label City FE Value.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFuelEconomyV alueUnitDetails/ EPAFiveCycleRoun dedAdjustedFinalLa belDetails	CityFuelEconomyNumb er	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer						0	999

ID	Name	Description	Path	Element	Min	Constraint	Type	Format				Max Length	Decimals	Min Value	Max Value
GL-244	EPA-Calculated 5-Cycle Rounded Adjusted Model Type Final Label Highway FE Value	The EPA-Calculated 5-Cycle Rounded Adjusted Model Type Final Label Highway FE Value.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFuelEconomyV alueUnitDetails/ EPAFiveCycleRoun dedAdjustedFinalLa belDetails	HighwayFuelEconomy Number	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer						0	999
GL-245	EPA-Calculated 5-Cycle Rounded Adjusted Model Type Final Label Combined FE Value	The EPA-Calculated 5-Cycle Rounded Adjusted Model Type Final Label Combined FE Value.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details/ EPAFuelEconomyV alueUnitDetails/ EPAFiveCycleRoun dedAdjustedFinalLa belDetails	CombinedFuelEconom yNumber	1	1 per Fuel Usage Value per FE Label except 1 per Fuel Usage and FE Value Units combination per FE Label when Fuel Usage = "EL"	N(3)	Integer						0	999
GL-248	EPA-Calculated 5-Cycle Rounded Adjusted Model Type Final Label Combined CO2 Value	The EPA-Calculated 5-Cycle Rounded Adjusted Model Type Final Label Combined CO2 Value	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ EPAGeneratedFuel EconomyLabelDetai ls	EPAFiveCycleRounded AdjustedFinalLabelCo mbinedCarbonDioxide Number	0	1 per FE Label	N(4)	Integer			4	0		0	9999
GL-214	Manufacturer-Calculated Adjusted Combined Model Type Fuel Consumption	Enter the adjusted combined model type fuel consumption required by 40 CFR 600.311-12(c) in units of gallon or gallon-equivalent per 100 miles for one fuel usage (GL-89) value as appropriate. For fuel usage = electricity, enter the charge depleting fuel consumption (which is normally zero for electric vehicles and non-blended PHEVs, but may not be zero for blended PHEVs). For PHEVs enter the fuel consumption for gasoline or diesel fuel usage as appropriate. For fuel usage = hydrogen, enter fuel consumption in units of kilogram per 100 miles. Based on Adjusted Combined MPG.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails	ManufacturerCalculate dAdjustedCombinedMo delTypeFuelConsumpti onValue	0	1 per Fuel Usage Value per FE Label	N(4,1)	Decimal			4	1		0.0	999.9
GL-275	Manufacturer Voluntary Higher Combined Fuel Consumption	Enter the Manufacturer Voluntary Higher Combined Fuel Consumption Value if applicable.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails	ManufacturerVoluntary HigherCombinedFuelC onsumptionValue	0	1 per Fuel Usage Value per FE Label	N(4,1)	Decimal			4	1		0.0	999.9

GL-215	**EPA-Calculated Adjusted Combined Model Type Fuel Consumption**	Verify-Calculated Adjusted Combined Model Type Fuel Consumption in units of gallon or gallon-equivalent per 100 miles for each fuel usage (GL-89) value. Do not perform calculations for PHEVs. For fuel usage = hydrogen, fuel consumption in units are kilogram per 100 miles. Based on Unrounded Adjusted Combined MPG.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details	EPAAdjustedCombined ModelTypeFuelConsu mptionValue	0	1 per Fuel Usage Value per FE Label	N(4,1)	Decimal				4	1	0.0	999.9
GL-168	**Manufacturer-calculated City Fuel Economy Label MPG Lower Range Value**	Enter the manufacturer-calculated city lower range value using the official city fuel economy label value.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerCityLa belDetails	MilesPerGallonLowerR angeNumber	0	(1 per Fuel Usage value)	N(3)	Integer	1	3				0	999
GL-169	**Manufacturer-Calculated City Fuel Economy Label MPG Upper Range Value**	Enter the manufacturer-calculated city upper range value using the official city fuel economy label value.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerCityLa belDetails	MilesPerGallonUpperR angeNumber	0	(1 per Fuel Usage value)	N(3)	Integer	1	3				0	999
GL-170	**Manufacturer-Calculated Highway Fuel Economy Label MPG Lower Range Value**	Enter the manufacturer-calculated highway lower range value using the official highway city fuel economy label value.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerHighw ayLabelDetails	MilesPerGallonLowerR angeNumber	FALSE	(1 per Fuel Usage value)	N(3)	Integer	1	3				0	999
GL-171	**Manufacturer-Calculated Highway Fuel Economy Label MPG Upper Range Value**	Enter the manufacturer-calculated highway upper range value using the official highway city fuel economy label value.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ManufacturerHighw ayLabelDetails	MilesPerGallonUpperR angeNumber	0	(1 per Fuel Usage value)	N(3)	Integer	1	3				0	999

GL-103	**Model Type Driving Range (EPA Method) (in miles)**	Enter the driving range (minimum and maximum, if applicable) for this model type's fuel usage value following EPA guidance. This must be provided for all alternative fuels and also for models operated on gasoline or diesel if they are dual or bi-fuel. Do not use FTC's driving range calculation procedures. Format as: 'nnn' for one driving range, or, 'nnn/nnn' for minimum and maximum driving range.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails	ModelTypeDrivingRang eText	0	1 per Fuel Usage value per FE Label	A(20)	String	1	20	'nnn' = Single range; 'nnn/nnn' = Shortest and longest ranges for this model type that have available multiple fuel tank capacitie s.			
GL-104	**Maximum Ethanol Percentage**	Enter the maximum ethanol percentage recommended by the manufacturer.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails	MaximumEthanolPerce ntageValue	0	1 per Fuel Usage value per FE Label	N(3,1)	Decimal				3	1	0	99.9
GL-105	**Maximum Bio-diesel Percentage**	Enter the maximum bio-diesel percentage recommended by the manufacturer.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails	MaximumBiodieselPerc entageNumber	0	1 per Fuel Usage value per FE Label	N(3)	Integer				3	0	0	100
	GL-216-GL-222 are required when Fuel Usage = "EL", otherwise not allowed.														
GL-216	**Charge Time (Hours) at 240 Volts (If Capable)**	Enter the Charge Time at 240 volts (if capable) in hours.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ElectricVehicleFuel EconomyDetails	ChargeTimeHoursAtTw oHundredFortyVoltsNu mber	0	1 per Fuel Usage only when Fuel Usage = "EL" per FE Label, otherwise not allowed	N(2)	Integer						0	99
GL-217	**Charge Time (Hours) at 120 Volts (If Capable)**	Enter the Charge Time at 120 volts (if capable) in hours.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ElectricVehicleFuel EconomyDetails	ChargeTimeHoursAtOn eHundredTwentyVoltsN umber	0	1 per Fuel Usage only when Fuel Usage = "EL" per FE Label, otherwise not allowed	N(2)	Integer						0	99

GL-218	**PHEV Total Driving Distance (miles)**	Enter the PHEV Total Driving Distance in miles rounded to the nearest whole number.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ElectricVehicleFuel EconomyDetails/ PlugInHybridElectric VehicleFuelEconom yDetails	TotalDrivingDistanceIn MilesNumber	1 per Fuel Usage only when Fuel Usage = "EL" per FE Label, otherwise not allowed	0	N(4)	Integer								0	9999
GL-219	**PHEV Composite (Gasoline/Electricity) City MPGe**	Enter the PHEV Composite (gasoline/electricity) City MPGe	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ElectricVehicleFuel EconomyDetails/ PlugInHybridElectric VehicleFuelEconom yDetails	CompositeGasolineEle ctricityCityMilesPerGall onEquivalentNumber	1 per Fuel Usage only when Fuel Usage = "EL" per FE Label, otherwise not allowed	0	N(4)	Integer								0	9999
GL-220	**PHEV Composite (Gasoline/Electricity) Highway MPGe**	Enter the PHEV Composite (gasoline/electricity) Highway MPGe	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ElectricVehicleFuel EconomyDetails/ PlugInHybridElectric VehicleFuelEconom yDetails	CompositeGasolineEle ctricityHighwayMilesPer GallonEquivalentNumb er	1 per Fuel Usage only when Fuel Usage = "EL" per FE Label, otherwise not allowed	0	N(4)	Integer								0	9999
GL-221	**Manufacturer-Calculated PHEV Composite (Gasoline/Electricity) Combined MPGe**	Enter the PHEV Composite (gasoline/electricity) Combined MPGe	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ElectricVehicleFuel EconomyDetails/ PlugInHybridElectric VehicleFuelEconom yDetails	CompositeGasolineEle ctricityCombinedMilesP erGallonEquivalentNum ber	1 per Fuel Usage only when Fuel Usage = "EL" per FE Label, otherwise not allowed	0	N(4)	Integer								0	9999
GL-222	**EPA-Calculated PHEV Composite (Gasoline/Electricity) Combined MPGe**	The Verify-calculated PHEV Composite (gasoline/electricity) Combined MPGe	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details	EPAPlugInHybridElectri cVehicleCompositeGas olineElectricityCombine dMilesPerGallonEquiva lentNumber	1 per Fuel Usage only when Fuel Usage = "EL" per FE Label, otherwise not allowed	0	N(4)	Integer								0	9999
GL-279	**Manufacturer-Calculated PHEV Composite (Gasoline/Electricity) Combined CO2**	Enter the PHEV Composite (gasoline/electricity) Combined CO2	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ ElectricVehicleFuel EconomyDetails/ PlugInHybridElectric VehicleFuelEconom yDetails	CompositeGasolineEle ctricityCombinedCarbo nDioxideNumber	1 per Fuel Usage only when Fuel Usage = "EL" per FE Label, otherwise not allowed	0	N(4)	Integer								0	9999

ID	Field Name	Description	XML Path	XML Element	Min	Requirement	Format	Data Type			Digits	Decimals	Low	High
GL-280	EPA-Calculated PHEV Composite (Gasoline/Electricity) Combined CO2	The Verify-calculated PHEV Composite (gasoline/electricity) Combined CO2	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details	EPAPlugInHybridElectri cVehicleCompositeGas olineElectricityCombine dCarbonDioxideNumbe r	0	1 per Fuel Usage only when Fuel Usage = "EL" per FE Label, otherwise not allowed	N(4)	Integer					0	9999
	Gas Guzzler Information													
GL-106	Gas Guzzler Exempt	Is this FE Label exempt from IRS Gas Guzzler regulations?	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails	GasGuzzlerExemptionI dentifier	1	1 per FE Label	A(1)	Enumeration						
GL-173	EPA-Calculated Gas Guzzler Mile Per Gallon	Calculate model type mpg for gas guzzler indication as specified in 40 CFR 600.513 for each passenger automobile model type.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details	GasGuzzlerMilesPerGa llonValue	0	1 per FE Label	N(4,1)	Decimal			4	1	0	999.9
GL-173.1	Manufacturer-Calculated Gas Guzzler Mile Per Gallon	Calculate model type mpg for gas guzzler indication as specified in 40 CFR 600.513 for each passenger automobile model type.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails	ManufacturerGasGuzzl erMPGValue	0	1 per FE Label	N(4,1)	Decimal			4	1	0	999.9
GL-174	EPA-Calculated Gas Guzzler Indicator	Verify-calculated field that indicates this model type is a gas guzzler (see guzzler comparison value set forth in the Gas Guzzler Table, updated each model year)	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ FuelUsageAndEcon omyDetails/ EPACalculatedFuel UsageAndEconomy Details	GasGuzzlerIndicator	1	1 per FE Label	A(1)	String	1	1				
	Base Level Info (Multiple Base Levels may exist within a FE Label Model Type)								Base Level is defined as a "unique combination of Basic Engine, Trans					
GL-109	Base Level Index	Assigned by Verify for each base level (i.e. inertia weight class) created by the manufacturer.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails	BaseLevelIndexNumbe r	1	1..n per FE Label (1 for each Base Level within a Model Type)	N(2)	Integer					1	99

GL-110	Inertia Weight Class	Inertia Weight Class (ref: 40 CFR 600.002-08): means the class, which is a group of test weights, into which a vehicle is grouped based on is loaded vehicle weight in accordance with the provisions of 40 CFR 86.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails	InertiaWeightClassNumber	1	1..n per FE Label (1 for each Base Level within a Model Type)	N(5)	Integer						0	99999
GL-110.5	Base Level Fuel Usage ID	Enter the applicable fuel used for this base level.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ FuelUsageDetails	FuelUsageIdentifier	1	1..n per FE Label (1..n for each Base Level within a Model Type)	A(3)	Enumeration							
GL-111	Manufacturer-Calculated Unrounded Unadjusted Base Level City FE Value	Provide the manufacturer-calculated unrounded/unadjusted Base Level City FE value (using derived 5-Cycle calculation method). This value is not rounded and not adjusted for the real world fuel economy shortfall.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ FuelUsageDetails/ ManufacturerUnroundedUnadjustedBaseLevelDetails	CityFuelEconomy4Value	0	1..n per FE Label (1 for each Base Level Fuel Usage per Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999
GL-112	Manufacturer-Calculated Unrounded Unadjusted Base Level Highway FE Value	Provide the manufacturer-calculated unrounded/unadjusted Base Level Highway FE value (using derived 5-Cycle calculation method). This value is not rounded and not adjusted for the real world fuel economy shortfall.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ FuelUsageDetails/ ManufacturerUnroundedUnadjustedBaseLevelDetails	HighwayyFuelEconomy4Value	0	1..n per FE Label (1 for each Base Level Fuel Usage per Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999

ID	Name	Description	XML Path	Element		Cardinality	Type	Format			Length	Decimal		Max Value
GL-113	**Manufacturer-Calculated Unrounded Unadjusted Base Level Combined FE Value**	Provide the manufacturer-calculated unrounded/unadjusted Base Level Combined FE value (using derived 5-Cycle calculation method). This value is not rounded and not adjusted for the real world fuel economy shortfall.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ FuelUsageDetails/ ManufacturerUnrou ndedUnadjustedBas eLevelDetails	CombinedFuelEconom y4Value	0	1..n per FE Label (1 for each Base Level Fuel Usage per Base Level within a Model Type)	N(7,4)	Decimal		7	4	0	999.9999
GL-113.5	**EPA-Calculated Unrounded Unadjusted Base Level City FE Value- 4 Decimal**	Verify-calculated unrounded undadjusted base level City fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Base Level Fuel Usage per Base Level within a Model Type)	N(7,4)	Decimal		7	4	0	999.9999
GL-113.6	**EPA-Calculated Unrounded Unadjusted Base Level Highway FE Value- 4 Decimal**	Verify-calculated unrounded undadjusted base level Highway fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Base Level Fuel Usage per Base Level within a Model Type)	N(7,4)	Decimal		7	4	0	999.9999
GL-113.7	**EPA-Calculated Unrounded Unadjusted Base Level Combined FE Value- 4 Decimal**	Verify-calculated unrounded undadjusted base level Combined fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Base Level Fuel Usage per Base Level within a Model Type)	N(7,4)	Decimal		7	4	0	999.9999
GL-249	**EPA-Calculated Unrounded Unadjusted Base Level City CO2 Value- 1 Decimal**	The EPA-Calculated Unrounded Unadjusted Base Level City CO2 Value- 1 Decimal.	NA	NA	0	1 per Fuel Usage per Base Level per FE Label	N(5,1)			5	1	0	9999.9
GL-250	**EPA-Calculated Unrounded Unadjusted Base Level Highway CO2 Value- 1 Decimal**	EPA-Calculated Unrounded Unadjusted Base Level Highway CO2 Value- 1 Decimal.	NA	NA	0	1 per Fuel Usage per Base Level per FE Label	N(5,1)			5	1	0	9999.9
GL-251	**EPA-Calculated Unrounded Unadjusted Base Level Combined CO2 Value- 1 Decimal**	EPA-Calculated Unrounded Unadjusted Base Level Combined CO2 Value- 1 Decimal.	NA	NA	0	1 per Fuel Usage per Base Level per FE Label	N(5,1)			5	1	0	9999.9
GL-116.5	**EPA-Calculated 5-Cycle Unrounded Adjusted Base Level City FE Value- 4 Decimal**	Verify-calculated 5-cycle unrounded adjusted base level city fuel economy value	NA	NA	0	1..n per FE Label (1 for each Base Level within a Model Type)	N(7,4)	Decimal		7	4	0	999.9999
GL-116.6	**EPA-Calculated 5-Cycle Unrounded Adjusted Base Level Highway FE Value- 4 Decimal**	Verify-calculated 5-cycle unrounded adjusted base level highway fuel economy value	NA	NA	0	1..n per FE Label (1 for each Base Level within a Model Type)	N(7,4)	Decimal		7	4	0	999.9999
GL-116.7	**EPA-Calculated 5-Cycle Unrounded Adjusted Base Level Combined FE Value- 4 Decimal**	Verify-calculated 5-cycle unrounded adjusted base level combined fuel economy value	NA	NA	0	1..n per FE Label (1 for each Base Level within a Model Type)	N(7,4)	Decimal		7	4	0	999.9999
GL-252	**EPA-Calculated 5-Cycle Unrounded Adjusted Base Level City CO2 Value- 1 Decimal**	The EPA-Calculated 5-Cycle Unrounded Adjusted Base Level City CO2 Value- 1 Decimal	NA	NA	0		N(5,1)	Decimal		5	1	0	9999.9
GL-253	**EPA-Calculated 5-Cycle Unrounded Adjusted Base Level Highway CO2 Value- 1 Decimal**	The EPA-Calculated 5-Cycle Unrounded Adjusted Base Level Highway CO2 Value- 1 Decimal	NA	NA	0		N(5,1)	Decimal		5	1	0	9999.9

ID	Name	Description	XPath	Element	Req	Occurrence	Type	Data Type	Min	Max	Pattern	Int	Dec	Min Val	Max Val
GL-254	**EPA-Calculated 5-Cycle Unrounded Adjusted Base Level Combined CO2 Value- 1 Decimal**	The EPA-Calculated 5-Cycle Unrounded Adjusted Base Level Combined CO2 Value- 1 Decimal	NA	NA	0		N(5,1)	Decimal				5	1	0	9999.9
Configuration Info (Multiple Configurations may exist within a Base Level)												**Configuration is defined as a "unique combination of Engine Code, Axle Ratio an**			
GL-117	**Configuration Index**	Enter the index number assigned by the manufacturer to identify each configuration within a Base Level that contains a unique combination of Engine Code, Axle Ratio and Transmission Configuration. Manufacturers should assign the code as specified below: 001-499: A portion of this configuration is represented by a test vehicle. 501-999: No portion of this configuration is represented by a test vehicle. (Formerly "DVC" (Data vehicle code) in CFEIS.)	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails	ConfigurationIndexNum ber	1	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(3)	Integer				3	0	1	999
GL-118	**Transmission Configuration Code**	Enter the Transmission Configuration Code assigned by the manufacturer for this Configuration. 1. The Transmission Configuration Code is used to distinguish a unique transmission configuration within a Transmission Class. Manufacturers may assign the code alphanumerically up to two characters (e.g. '1', 'A', '02', 'A2', '3B', etc.). 2. For a definition of Transmission Configuration, see 40 CFR 600.002-08 and A/C 83A. 3. This data element replaces all of the CFEIS "GR" and "GL" data elements and is functionally equivalent to the CFEIS "Transmission Configuration Link" data element.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails	TransmissionConfigurat ionCode	1	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	A(2)	String	1	2	[A-Z0-9] {1,2}				
GL-119	**Engine Code**	Enter the Engine Code for this Configuration which is used to distinguish a unique combination of displacement, fuel delivery system, calibration, emission control, … within a Engine system combination (ref: 40 CFR 600.002-08).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails	EngineCodeText	1	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	A(14)	String	1	14					
GL-120	**Axle Ratio**	Enter the axle ratio for this Configuration.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails	AxleRatioValue	1	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(3,2)	Decimal				3	2	0.00	9.99
GL-120.1	**EPA-Calculated Unrounded Unadjusted Configuration City FE Value- 4 Decimal**	Verify-calculated unrounded unadjusted configuration city fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999

GL-120.2	**EPA-Calculated Unrounded Unadjusted Configuration Highway FE Value- 4 Decimal**	Verify-calculated unrounded unadjusted configuration highway fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999
GL-120.3	**EPA-Calculated Unrounded Unadjusted Configuration Combined FE Value- 4 Decimal**	Verify-calculated unrounded unadjusted configuration combined fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999
GL-254.5	**EPA-Calculated Unrounded Unadjusted Configuration City CO2 Value- 1 Decimal**	The EPA-Calculated Unrounded Unadjusted Configuration City CO2 Value- 1 Decimal	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(5,1)	Decimal				5	1	0	9999.9
GL-255	**EPA-Calculated Unrounded Unadjusted Configuration Highway CO2 Value- 1 Decimal**	The EPA-Calculated Unrounded Unadjusted Configuration Highway CO2 Value- 1 Decimal	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(5,1)	Decimal				5	1	0	9999.9
GL-256	**EPA-Calculated Unrounded Unadjusted Configuration Combined CO2 Value- 1 Decimal**	The EPA-Calculated Unrounded Unadjusted Configuration Combined CO2 Value- 1 Decimal	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(5,1)	Decimal				5	1	0	9999.9
GL-120.4	**EPA-Calculated 5-cycle Unrounded Adjusted Configuration City FE Value- 4 Decimal**	Verify-calculated 5-cycle unrounded adjusted configuration city fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999
GL-120.5	**EPA-Calculated 5-cycle Unrounded Adjusted Configuration Highway FE Value- 4 Decimal**	Verify-calculated 5-cycle unrounded adjusted configuration highway fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999
GL-120.6	**EPA-Calculated 5-cycle Unrounded Adjusted Configuration Combined FE Value- 4 Decimal**	Verify-calculated 5-cycle unrounded adjusted configuration combined fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999
GL-257	**EPA-Calculated 5-cycle Unrounded Adjusted Configuration City CO2 Value- 1 Decimal**	The EPA-Calculated 5-cycle Unrounded Adjusted Configuration City CO2 Value- 1 Decimal	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(5,1)	Decimal				5	1	0	9999.9
GL-258	**EPA-Calculated 5-cycle Unrounded Adjusted Configuration Highway CO2 Value- 1 Decimal**	The EPA-Calculated 5-cycle Unrounded Adjusted Configuration Highway CO2 Value- 1 Decimal	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(5,1)	Decimal				5	1	0	9999.9
GL-259	**EPA-Calculated 5-cycle Unrounded Adjusted Configuration Combined CO2 Value- 1 Decimal**	The EPA-Calculated 5-cycle Unrounded Adjusted Configuration Combined CO2 Value- 1 Decimal	NA	NA	0	1..n per FE Label (1 for each Configuration within each Base Level within a Model Type)	N(5,1)	Decimal				5	1	0	9999.9
	Sub-configuration Info (Multi subconfigurations may exist within a Configuration)										**A sub-configuration is defined as a unique combination of equivalent test weight**				

GL-121	**Subconfiguration Index**	Enter the index number assigned by the manufacturer to identify this subconfiguration within a configuration. Subconfiguration Index is used to identify each subconfiguration within a configuration that contains a unique combination of equivalent test weight and road load horse power. Manufacturers should assign this code as specified below: 01-49: for a subconfiguration represented by a test vehicle. 51-99: for a subconfiguration not represented by a test vehicle. (Formerly "RLC" (Road Load Code) in CFEIS.)	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDe tails	SubConfigurationIndex Number	1	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer			2		1	99
GL-122	**Total Road Load Horsepower**	Enter the total road load horsepower at 50 mph (TRLHP50).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDe tails	RoadLoadHorsepower Value	1	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(3,1)	Decimal			3	1	0	99.9
GL-123	**Equivalent Test Weight (ETW)**	Enter the Equivalent Test Weight (ETW) within a specified Inertia Weight Class.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDe tails	EquivalentTestWeightV alue	1	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(5)	Enumeration	1	5			0	14000
GL-125	**Altitude Code**	Enter the altitude for which the vehicles within this subconfiguration are offered for sale.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDe tails	SaleAltitudeCode	1	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration						
GL-125.0.1	**EPA-Calculated Unrounded Unadjusted Subconfiguration City FE Value- 4 Decimal**	Verify-calculated unrounded unadjusted subconfiguration city fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(7,4)	Decimal			7	4	0	999.9999
GL-125.0.2	**EPA-Calculated Unrounded Unadjusted Subconfiguration Highway FE Value- 4 Decimal**	Verify-calculated unrounded unadjusted subconfiguration highway fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(7,4)	Decimal			7	4	0	999.9999
GL-260	**EPA-Calculated Unrounded Unadjusted Subconfiguration City CO2 Value- 1 Decimal**	The EPA-Calculated Unrounded Unadjusted Subconfiguration City CO2 Value- 1 Decimal	NA	NA	0	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(5,1)	Decimal			5	1	0	9999.9

ID	Field Name	Description	XPath	Element	Min Occurs	Occurrence	Format	Data Type	Min	Max	Pattern	Int	Dec	Low	High
GL-261	**EPA-Calculated Unrounded Unadjusted Subconfiguration Highway CO2 Value- 1 Decimal**	The EPA-Calculated Unrounded Unadjusted Subconfiguration Highway CO2 Value- 1 Decimal	NA	NA	0	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(5,1)	Decimal				5	1	0	9999.9
GL-125.0.4	**EPA-Calculated 5-cycle Unrounded Adjusted Subconfiguration City FE Value- 4 Decimal**	Verify-calculated 5-cycle unrounded uadjusted subconfiguration city fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(7,4)	Decimal				7	4	0	999.9999
GL-125.0.5	**EPA-Calculated 5-cycle Unrounded Adjusted Subconfiguration Highway FE Value- 4 Decimal**	Verify-calculated 5-cycle unrounded uadjusted subconfiguration highway fuel economy value.	NA	NA	0	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(7,4)	Decimal				7	4	0	999.9999
GL-262	**EPA-Calculated 5-cycle Unrounded Adjusted Subconfiguration City CO2 Value- 1 Decimal**	The EPA-Calculated 5-cycle Unrounded Adjusted Subconfiguration City CO2 Value- 1 Decimal	NA	NA	0	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(5,1)	Decimal				5	1	0	9999.9
GL-263	**EPA-Calculated 5-cycle Unrounded Adjusted Subconfiguration Highway CO2 Value- 1 Decimal**	The EPA-Calculated 5-cycle Unrounded Adjusted Subconfiguration Highway CO2 Value- 1 Decimal	NA	NA	0	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(5,1)	Decimal				5	1	0	9999.9
GL-281	**N/V Ratio**	Enter the applicable N/V ratio for this test vehicle configuration.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDetails	NVRatioValue	0	1..n per FE Label (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(4,1)	Decimal				4	1	0	999.9
	Sub-configuration Sales Info (Multiple Subconfiguration-sales may exist within a Subconfiguration)									A sub-configuration is defined as a unique combination of equivalent test weight					
GL-125.5	**Manufacturer Code**	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDetails/ SubConfigurationSalesInformationDetails	EPAManufacturerCode	1	1..n per FE Label (1 for each Subconfiguration sales row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(3)	String	3	3	[A-Z0-9] {3}				

GL-125.6	**Division Code**	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDetails/ SubConfigurationSalesInformationDetails	ManufacturerDivisionCode	1	1..n per FE Label (1 for each Subconfiguration sales row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer	1	2				1	99
GL-125.7	**Carline Code**	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDetails/ SubConfigurationSalesInformationDetails	CarlineCode	1	1..n per FE Label (1 for each Subconfiguration sales row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(3)	Integer	1	3			1	999
GL-126	**Test Group**	Enter the applicable test group name for this subconfiguration.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDetails/ SubConfigurationSalesInformationDetails	TestGroupName	1	1..n per FE Label (1 for each Subconfiguration sales row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(12)	String	12	12				
GL-124	**Subconfiguration Projected Sales**	Enter the projected sales for this subconfiguration.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDetails/ SubConfigurationSalesInformationDetails	SubConfigurationProjectedSalesNumber	1	1..n per FE Label (1 for each Subconfiguration sales row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(6)	Integer					1	999999
	Test Vehicle Info (Multiple vehicles with multiple tests may exist within a sub-configuration)														

GL-127	**Test Number**	Enter an applicable Test Number for this FE Label that was previously assigned by Verify in Test Information. Test Number must be entered when Subconfiguration Index (GL-121) is 1 to 49 and Configuration Index (GL-117) is 1 to 499 which indicates that the subconfiguration is represented by a tested vehicle.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDe tails/ TestVehicleDetails	TestNumberIdentifier	0	1..n per FE Label (1 ..n for each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(12)	String							
GL-128	**Vehicle ID**	A unique alphanumeric identifier assigned by the manufacturer to each test vehicle.	NA	NA	1	1..n per FE Label (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(20)	String	1	20				
GL-129	**Vehicle Configuration Number**	A number previously assigned to specify a unique test vehicle configuration.	NA	NA	1	1..n per FE Label (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer					0	99
GL-130	**Test Category**	The applicable test category for this test.	NA	NA	1	1..n per FE Label (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(6)	Enumeration						

GL-130.2	**Test Fuel Category**	This field will automatically be filled based on the Test Fuel Category (TI-44) in Test Information) .	NA	NA	1	1..n per FE Label (1 per test fuel type)	A(3)	Enumeration							
GL-130.5	**Test 5-Cycle Category**		NA	NA	1	1..n per FE Label (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(5)	Enumeration							
GL-130.5	**Test 5-Cycle Category- Continued**	A valid test number is required for these fuel categories.	NA	NA											
GL-130.5	**Test 5-Cycle Category- Continued**		NA	NA											

ID	Field	Description	Path	XML Element	Min	Occurrence	Format	Type				Int	Dec	Min	Max
GL-131	**Analytically-Derived FE / CREE Indicator**	Is this test analytically derived?	NA	NA	1	1..n per FE Label (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration							
GL-132	**Data Substitution Indicator**	Enter the applicable Data Substitution Indicator for this test.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDe tails/ TestVehicleDetails	DataSubstitutionIndicat or	1	1..n per FE Label (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration							
GL-133	**Averaging Method**	Enter the Averaging Method to be used if this Test Number is part of an averaging group (i.e. subconfiguration equipped with a multi-mode transmission or Shift Indicator Light), where: N = No averaging S = Simple averaging (Sum(i=1 to n) (FET(i) * WT(i))) H = Harmonic averaging (1/(Sum(i=1 to n) (FET(i) / WT(i)))) Note: WT(i) = Averaging Weighting Factor (GL-135) of the MPG value, specified by the manufacturer based on EPA's Guidance (ref: CCD-01-25R, CD-87-01 and A/C 83A); and, FET(i) = MPG of test.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDe tails/ TestVehicleDetails	AveragingMethodIdentif ier	1	1..n per FE Label (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration							
GL-134	**Averaging Group Indicator**	Enter the Averaging Group Indicator assigned by the manufacturer that will be used to identify all the tests (of the same test procedure) that need to be averaged together.	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDe tails/ TestVehicleDetails	AveragingGroupIndicat or	0	1..n per FE Label (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	String	1	1	[A-Z0-9]				
GL-135	**Averaging Weighting Factor**	Enter the averaging weighting factor for this vehicle mpg if equipped with either Shift Indicator Light (SIL) or multi-mode transmission. (Formerly 'Test Group Weighting' in CFEIS).	FuelEconomyLabel Submission/ FuelEconomyLabel Details/ ModelTypeDetails/ BaseLevelDetails/ ConfigurationDetails / SubConfigurationDe tails/ TestVehicleDetails	AveragingWeightingFa ctorValue	0	1..n per FE Label (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(3,2)	Decimal				3	2	0.01	0.99
GL-136	**EPA FE Label Comments**	EPA only: Enter any additional comments regarding the FE Label for this Model Type.		ManufacturerComment Text	0	1 per FE Label	A(1000)	String	1	1000					

EPA Entered Fuel Cost Fields (The database tables for these fields should be moved to be a stand-alone table.)

ID	Name	Description													Min	Max
GL-175	Fuel Cost (for each fuel usage type)	Verify table that stores the fuel cost for each fuel usage type for each model year that is entered by EPA to calculate annual fuel costs for each fuel economy label.	NA	NA	1	1 for each Fuel Usage Type per Model Year in Verify Table	N(6,2)	Decimal				6	2			9999.99
GL-175.1	Fuel Cost Model Year	The fuel cost model year entered by EPA for each fuel usage type.	NA	NA	1	1 for each Fuel Usage Type per Model Year in Verify Table	N(4)	Integer	4	4						2050
GL-177	Fuel Cost Effective Date	The effective date of the fuel cost value.	NA	NA	1	1 for each Fuel Usage Type per Model Year in Verify Table	Date	Date								
GL-178	Fuel Cost Ineffective Date	The ineffective date of the fuel cost value.	NA	NA	1	1 for each Fuel Usage Type per Model Year in Verify Table	Date	Date								
EPA Entered 5-Year Fuel Cost of the Average Vehicle (new stand-alone database table for each model year)																
GL-264	5-Year Fuel Cost of Average Vehicle	EPA will provide the 5-Year Fuel Cost of the Average Vehicle at least one time per model year. Only the latest value should be treated as active, however all previous values should be saved for reference.	NA	NA	1	1 per Model Year	N(6)	Integer							0	999,999
GL-265	5-Year Fuel Cost of Average Vehicle- Model Year	The model year for the corresponding 5-Year Fuel Cost of the Average Vehicle.	NA	NA	1	1 per Database Table	N(4)	Integer								2100
GL-266	5-Year Fuel Cost of Average Vehicle- Effective Date	The effective date of the 5-Year Fuel Cost of the Average Vehicle	NA	NA	1	1 per Model Year	Date	Date								
GL-267	5-Year Fuel Cost of Average Vehicle- Ineffective Date	The ineffective date of the 5-Year Fuel Cost of the Average vehicle.	NA	NA	0	1 per Model Year	Date	Date								
EPA Entered Derived 5-Cycle Calculation Constants (4 constants required for each Model Year entry)																
GL-180	Derived 5C City Slope Constant	Verify table that stores the required city slope constant for each model year that is entered by EPA to calculate the city fuel economy for derived 5-cycle fuel economy labels.

Also used for the Litmus Threshold calculation. | NA | NA | 1 | 1 for each Model Year entry in Verify Table | N(7,6) | Decimal | | | | 5 | 4 | 0.0000 | | 9.9999 |
| GL-181 | Derived 5C City Offset Constant | Verify table that stores the required city offset constant for each model year that is entered by EPA to calculate the city fuel economy for derived 5-cycle fuel economy labels.

Also used for the Litmus Threshold calculation. | NA | NA | 1 | 1 for each Model Year entry in Verify Table | N(7,6) | Decimal | | | | 7 | 6 | 0.000000 | | 9.999999 |
| GL-182 | Derived 5C Highway Slope Constant | Verify table that stores the required highway slope constant for each model year that is entered by EPA to calculate the highway fuel economy for derived 5-cycle fuel economy labels.

Also used for the Litmus Threshold calculation. | NA | NA | 1 | 1 for each Model Year entry in Verify Table | N(7,6) | Decimal | | | | 5 | 4 | 0.0000 | | 9.9999 |
| GL-183 | Derived 5C Highway Offset Constant | Verify table that stores the required highway offset constant for each model year that is entered by EPA to calculate the highway fuel economy for derived 5-cycle fuel economy labels.

Also used for the Litmus Threshold calculation. | NA | NA | 1 | 1 for each Model Year entry in Verify Table | N(7,6) | Decimal | | | | 7 | 6 | 0.000000 | | 9.999999 |

Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
N = New dataset C = Correction of an existing Verify dataset	Light-Duty	FE Label		Mfr	Front End	XML	
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR001a LD-FE-GL-BR001b LD-FE-GL-BR002 LD-FE-GL-BR180 LD-FE-GL-BR195
	Light-Duty	FE Label		Verify	Front End	XML	LD-FE-GL-BR001a LD-FE-GL-BR001b LD-FE-GL-BR002 LD-FE-GL-BR042 LD-FE-GL-BR043 LD-FE-GL-BR044a LD-FE-GL-BR044b LD-FE-GL-BR180
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR001a LD-FE-GL-BR001b LD-FE-GL-BR002 LD-FE-GL-BR004 LD-FE-GL-BR180
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR005 LD-FE-GL-BR196 LD-FE-GL-BR197
	Light-Duty	FE Label		Verify	Front End	Assigned	
	Light-Duty	FE Label		Manufacturer	Front End	XML	CR-BR11 CR-BR12 LD-FE-GL-BR097 LD-FE-GL-BR165
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-CA-BR169 LD-FE-CA-BR208 LD-FE-GL-BR003 LD-FE-GL-BR004 LD-FE-GL-BR045 LD-FE-GL-BR098
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-CA-BR169 LD-FE-CA-BR208 LD-FE-GL-BR004 LD-FE-GL-BR046 LD-FE-GL-BR098

	Light-Duty	FE Label	This rule change is needed due to the 4 new Carline Class Codes added for Small and Standard SUVs.	Mfr	Front End	XML	LD-FE-CA-BR169 LD-FE-CA-BR208 LD-FE-GL-BR004 LD-FE-GL-BR047 LD-FE-GL-BR098 LD-FE-GL-BR137
	Light-Duty	FE Label	The Testgroup Name will be used to pull in the Hybrid/Combustion Engine Description information (TG-26 through TG-35) from Testgroup Information. The referenced data elements (GL-16 through 54) do not need to be re-stored in FE Label tables, but, they do need to be displayed on FE Label screens.	Mfr	Front End	XML	LD-FE-GL-BR006 LD-FE-GL-BR050 LD-FE-GL-BR199 LD-FE-GL-BR200 LD-FE-GL-BR202 LD-FE-GL-BR204
C = Combustion Engine E = Electric Motor	Light-Duty	FE Label	NEW TG-7.1	Verify	Back End	Pre-existing Data	
N - No Y - Yes	Light-Duty	FE Label	NEW TG-7.2	Verify	Back End	Pre-existing Data	
G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity HYD - Hydraulic	Light-Duty	FE Label	NEW TG-7.3	Verify	Back End	Pre-existing Data	LD-FE-CA-BR166 LD-FE-CA-BR167
MFI = Multipoint/sequential fuel injection CMIX = CNG mixer unit GDI = Spark Ignition Direct fuel injection GDPI = Spark Ignition direct & ported injection LMIX = LPG Mixer CRDI = Common Rail Direct Diesel Injection GFI = Gaseous Fuel Injection DDI = Direct Diesel Injection (non-common rail) IDI = Indirect Diesel Injection TBI = Throttle Body Injection OT = Other (contact EPA prior to use)	Light-Duty	FE Label	NEW TG-7.4	Verify	Back End	Pre-existing Data	
N=No Y=Yes	Light-Duty	FE Label	NEW TG-7.4.1	Verify	Back End	Pre-existing Data	
SEPARATE - Fuels Stored Separately TOGETHER- Fuels Stored Together	Light-Duty	FE Label	NEW TG-7.6	Verify	Back End	Pre-existing Data	
SEPARATE- Fuels Combusted Separately TOGETHER - Fuels Combusted Together	Light-Duty	FE Label	NEW TG-7.7	Verify	Back End	Pre-existing Data	
N - No Y - Yes	Light-Duty	FE Label	NEW TG-7.8	Verify	Back End	Pre-existing Data	
N - No Y - Yes	Light-Duty	FE Label	NEW TG-7.9	Verify	Back End	Pre-existing Data	

N - No Y - Yes	Light-Duty	FE Label	NEW TG-8.3	Verify	Back End	Pre-existing Data	
EM = IC Engine/Electric Motor EH = IC Engine/Hydraulic OT = Other	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5) TG-26	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-27	Verify	Back End	Pre-Existing Data	
4SI - 4-Stroke Spark Ignition 2SI - 2-Stroke Spark Ignition 4SCI - 4-Stroke Compression Ignition 2SCI - 2-Stroke Compression Ignition RT - Rotary GT - Gas Turbine RK - Rankine STIR - Stirling OT - Other	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-28	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-29	Verify	Back End	Pre-Existing Data	
I = Inline V = V-shaped engine H = Horizontally Opposed W = W-shaped engine RT = Rotary OT = Other	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-30	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-31	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-32	Verify	Back End	Pre-Existing Data	
N = No Y = Yes	Light-Duty	FE Label	TG-32.5	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	TG-32.6	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	The Engine Configuration Number along with the Testgroup Name (GL-13.5) will be used to pull in the Hybrid/Combustion Engine Description information (TG-26 through TG-35) from Engine Configuration Information within Testgroup Information. The referenced data elements (GL-16 through 54) do not need to be re-stored in FE Label tables, but, they do need to be displayed on FE Label screens.	Mfr	Front End	XML	LD-FE-GL-BR006 LD-FE-GL-BR040 LD-FE-GL-BR199 LD-FE-GL-BR200
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-38	Verify	Back End	Pre-Existing Data	LD-FE-CA-BR203 LD-FE-GL-BR199

Y = Yes N = No	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-39	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-40	Verify	Back End	Pre-Existing Data	
Y = Yes N = No	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-41	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-42	Verify	Back End	Pre-Existing Data	
Y = Yes N = No	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-43	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-44	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-45	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-46	Verify	Back End	Pre-Existing Data	
NA=Naturally aspirated TC=Turbocharged SC=Supercharged TS=Turbocharged+Supercharged OT=Other	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-47	Verify	Back End	Pre-Existing Data	LD-FE-CA-BR204 LD-FE-GL-BR200
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-48	Verify	Back End	Pre-Existing Data	
N = Single P = Parallel S = Series PS = Both (Parallel and Series)	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-49	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-50	Verify	Back End	Pre-Existing Data	
A = Air L = Liquid N = N/A	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-51	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-52	Verify	Back End	Pre-Existing Data	
B = Battery(s) C = Capacitor OT = Other	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-77	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-78	Verify	Back End	Pre-Existing Data	

LA = Lead Acid NIMH = NiMH LI = Li+ OT = Other	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-79	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-80	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-81	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-82	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-83	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-84	Verify	Back End	Pre-Existing Data	
ON = On-Board OFF = Off-Board B = Both	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-85	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-86	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-87	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-88	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-89	Verify	Back End	Pre-Existing Data	
NA = Not applicable (default) ERE = Electrical Regen Brake HRE = Hydraulic Regen Brake OT = Other	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-90	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-91	Verify	Back End	Pre-Existing Data	
F = Front Wheels R = Rear Wheels B = Both	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-92	Verify	Back End	Pre-Existing Data	
N = No Y = Yes	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-93	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-94	Verify	Back End	Pre-Existing Data	

ACI = AC Induction DCB = DC Brushless DCPM = DC Permanent Magnet, brushless SR = Switched Reluctance OT = Other	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-95	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-96	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-97	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-98	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-99	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-100	Verify	Back End	Pre-Existing Data	
	Light-Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-101	Verify	Back End	Pre-Existing Data	
A = Automatic AM = Automated Manual M = Manual SA = Semi-Automatic CVT= Continuously Variable SCV=Selectable Continuously Variable (e.g. CVT with paddles) AMS= Automated Manual- Selectable (e.g. Automated Manual with paddles) OT = Other	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-CA-BR202 LD-FE-GL-BR093 LD-FE-GL-BR117 LD-FE-GL-BR145 LD-FE-GL-BR194
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR007
Y = Yes N = No	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-CA-BR202 LD-FE-GL-BR117
Y = Yes N = No	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-CA-BR202 LD-FE-GL-BR117
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-CA-BR202 LD-FE-GL-BR058 LD-FE-GL-BR117

4 = 4-wheel Drive F = 2-wheel Drive, front R = 2-wheel drive, rear P= Part-time 4-wheel drive A = All wheel drive	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-CA-BR202 LD-FE-GL-BR117
1 = No gear ratio < 1 2 = Top gear ratio < 1	Light-Duty	FE Label		Mfr	Front End	XML	
N = No Y = Yes	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR008
N = No Y = Yes	Light-Duty	FE Label		Mfr	Front End	XML	
N = Not applicable V = Continuously variable, user selectable C = Computer controlled multiple gear ratios 1 = 1 discrete lock-up rpm range 2 = 2 discrete lock-up rpm ranges 3 = 3 discrete lock-up rpm ranges 4 = 4 discrete lock-up rpm ranges 5 = 5 discrete lock-up rpm ranges 6 = 6 discrete lock-up rpm ranges 7 = 7 discrete lock-up rpm ranges 8 = 8 discrete lock-up rpm ranges 9 = 9 discrete lock-up rpm ranges	Light-Duty	FE Label		Mfr	Front End	XML	
N = Not applicable V = Continuously variable C = Computer controlled multiple gear ratios 1 = 1 discrete lock-up rpm range 2 = 2 discrete lock-up rpm ranges 3 = 3 discrete lock-up rpm ranges 4 = 4 discrete lock-up rpm ranges 5 = 5 discrete lock-up rpm ranges 6 = 6 discrete lock-up rpm ranges 7 = 7 discrete lock-up rpm ranges 8 = 8 discrete lock-up rpm ranges 9 = 9 discrete lock-up rpm ranges	Light-Duty	FE Label		Mfr	Front End	XML	
N = No Y = Yes L = Yes, but with lock-out features	Light-Duty	FE Label		Mfr	Front End	XML	

Determined by Verify from GL-67 (Transmission Type) and GL-71 (Total number of Transmission Gears) as follows: If GL-67 is: A= "Auto(AX)" AM = "Auto(AMX)" M = "Manual(MX)" SA = "Auto(SX)" CVT= "Auto(AV)" SCV= "Auto(AV-SX)" AMS= "Auto(AM-SX)" OT = "Other(OT-X)" Derived field is in quotes-- where: X is the total number of forward gears listed in GL-71.	Light-Duty	FE Label	Determined by Verify from GL-67 (Transmission Type) and GL-71 (Total number of Transmission Gears) as follows: If GL-67 is: A= "Auto(AX)" AM = "Auto(AMX)" M = "Manual(MX)" SA = "Auto(SX)" CVT= "Auto(AV)" SVC= "Auto(AV-SX)" AMS= "Auto(AM-SX)" OT = "Other(OT-X)" Derived field is in quotes-- where: X is the total number of forward gears listed in GL-71.	Verify	Back End	Assigned	
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR099
5C-DRV = Derived 5-cycle label 5C-VEHSPEC = Vehicle Specific 5-cycle label 5C-MOD = Derived Vehicle Specific 5-cycle Calculation Approach for city label but Modified 5-cycle Calculation Approach for Highway label EV = Electric Vehicle 2-cycle label EV-5C = Electric Vehicle 5-cycle label PHEV = Plug-in Hybrid Label	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR100 LD-FE-GL-BR101
HEV-2B = Hybrid 2 Bag HEV-4B = Hybrid 4 Bag	Light-Duty	FE Label		Mfr	Front End	XML	
CD-2C = Charge Depleting 2-cycle CD-5C = Charge Depleting 5-cycle	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR102
CS-2C = Charge Sustaining 2-cycle CS-3C = Charge Sustaining 3-cycle CS-5C = Charge Sustaining 5-cycle	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR103

Y = Yes N = No	Light-Duty	FE Label	This can be submitted for all model years.	Manufacturer	Front End	XML	**Note to CSC: this data element name change should only be made to the front and back-end screen display but not to the XML or database.**
N = No (default) Y = Yes	Light-Duty	FE Label		EPA	Back End	Assigned	
Valid calendar date.	Light-Duty	FE Label		Mfr	Front End	XML	
N = No Y = Yes	Light-Duty	FE Label		Mfr	Front End	XML	
CA = California + CAA Section 177 states FA = Federal	Light-Duty	FE Label		Mfr	Front End	XML	
Display full list of all US states	Light-Duty	FE Label		Mfr	Front End	XML	
	Light-Duty	FE Label	This field is derived from Cert data by matching Testgroup (GL-13.5). CR-7.	Verify	Back End	Pre-existing data	

N = No Y = Yes (city, highway or both are lower)	Light-Duty	FE Label	Even though the city, highway, or combined mpg will be lower, EPA should recalculate the combined mpg for use in the annual fuel cost estimation.	Mfr	Front End	XML	
1 2 3 4 5 6 7 8 9 10	Light-Duty	FE Label	This is a new field.	Manufacturer	Frontend	XML	LD-FE-GL-BR146
1 2 3 4 5 6 7 8 9 10	Light-Duty	FE Label		Verify	Backend	Assigned	
1 2 3 4 5 6 7 8 9 10	Light-Duty	FE Label	This is a new field.	Manufacturer	Frontend	XML	LD-FE-GL-BR148

			Verify Light-Duty Data Requirements				
1 2 3 4 5 6 7 8 9 10	Light-Duty	FE Label		Verify	Backend	Assigned	
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR006 LD-FE-GL-BR050 LD-FE-GL-BR150 LD-FE-GL-BR151 LD-FE-GL-BR152 LD-FE-GL-BR153 LD-FE-GL-BR154 LD-FE-GL-BR155
1 2 3 4 5 6 7 8 9 10	Light-Duty	FE Label	This is a new field.	Manufacturer	Frontend	XML	LD-FE-GL-BR156
1 2 3 4 5 6 7 8 9 10	Light-Duty	FE Label		Verify	Backend	Assigned	
	Light-Duty	FE Label		Manufacturer	Frontend	XML	LD-FE-GL-BR159 LD-FE-GL-BR160

	Light-Duty	FE Label		Verify	Backend	Assigned	
	Light-Duty	FE Label	This is a new field.	Manufacturer	Frontend	XML	LD-FE-GL-BR159 LD-FE-GL-BR163
	Light-Duty	FE Label		Verify	Backend	Assigned	
N = No Y = Yes				Verify	Backend	Assigned	
N = No Y = Yes	Light-Duty	FE Label	"Police only" vehicle should not be included in the Fuel Economy Guide	Mfr	Front End	XML	

N = No Y = Yes	Light-Duty	FE Label			Mfr	Front End	XML	LD-FE-GL-BR011 LD-FE-GL-BR012
RL = Relabel - label value decreased RH = Relabel option - label value increased	Light-Duty	FE Label			Mfr	Front End	XML	LD-FE-GL-BR013 LD-FE-GL-BR014
Y = Yes N = No	Light-Duty	FE Label	This is a new field.		Verify	Back End	Assigned	
	Light-Duty	FE Label	This is a new field.		Verify	Back End	Assigned	
G = Gasoline (Regular Unleaded Recommended) GM = Gasoline (Mid Grade Unleaded Recommended) GMR = Gasoline (Mid Grade Unleaded Required) GP = Gasoline (Premium Unleaded Recommended) GPR = Gasoline (Premium Unleaded Required) D = Diesel, low sulfur (500 ppm) (obsolete after MY2006); DU = Diesel, ultra low sulfur (15 ppm, maximum) M = Methanol E = Ethanol (E85) CNG = Compressed Natural Gas LNG = Liquefied Natural Gas LPG = Liquid Petroleum Gas H = Hydrogen EL = Electricity	Light-Duty	FE Label	Existing values of 'D' (Diesel, low sulfur (500 ppm)) are valid.		Mfr	Front End	XML	LD-FE-CA-BR020 LD-FE-GL-BR015 LD-FE-GL-BR016 LD-FE-GL-BR049 LD-FE-GL-BR051 LD-FE-GL-BR104a LD-FE-GL-BR104b LD-FE-GL-BR166

MPG = miles per gallon (default) MPK = miles per kilogram KW-HR/100Miles = kilowatt-hour per 100 miles	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR017 LD-FE-GL-BR018 LD-FE-GL-BR041 LD-FE-GL-BR105 LD-FE-GL-BR106 LD-FE-GL-BR107 LD-FE-GL-BR167 LD-FE-GL-BR168
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR169
		FE Label	EPA-Calculated Annual Fuel Cost (GL-81.1) = 15,000 x "Fuel Cost (for each Fuel Usage Type)" (GL-175) / "EPA-Calculated 5-Cycle Rounded Adjusted Model Type Final Label Combined FE Value" (GL-245) Rounding: ASTM round the result to the nearest $50. Note: ASTM [Value / 50,0] x 50. This should result in values ending exactly in "25" should round down and values ending exactly in "75" should round up. Only perform this calculation if MY (GL-3) >= "2013". Don't perform this calculation for EVs and PHEVs (ie, where one of the fuel usage values (GL-89) = "EL") until EPA provides the final calculation requirements. Verify should use the previous model year Fuel Costs until the new model year values are available.	Verify	Backend	Assigned	
	Light-Duty	FE Label		Mfr	Front End	XML	

	Light-Duty	FE Label		Mfr	Front End	XML	
	Light-Duty	FE Label		Mfr	Front End	XML	
	Light-Duty	FE Label		Mfr	Back End	XML	
	Light-Duty	FE Label		Mfr	Back End	XML	
	Light-Duty	FE Label		Mfr	Back End	XML	

Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR170
Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR171
Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR172
Light-Duty	FE Label		Verify	Backend	Assigned	
Light-Duty	FE Label		Verify	Backend	Assigned	
Light-Duty	FE Label		Verify	Backend	Assigned	

	Light-Duty	FE Label		Mfr	Front End	XML	
	Light-Duty	FE Label		Mfr	Front End	XML	
	Light-Duty	FE Label		Mfr	Front End	XML	
	Light-Duty	FE Label		Mfr	Back End	XML	
	Light-Duty	FE Label		Mfr	Back End	XML	

Light-Duty	FE Label		Mfr	Back End	XML
Light-Duty	FE Label		Verify	Front End	Assigned
Light-Duty	FE Label		Verify	Front End	Assigned
Light-Duty	FE Label		Verify	Front End	Assigned
Light-Duty	FE Label		Verify	Backend	Assigned
Light-Duty	FE Label		Verify	Backend	Assigned

Light-Duty	FE Label		Verify	Backend	Assigned	
Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR021a LD-FE-GL-BR021b LD-FE-GL-BR023 LD-FE-GL-BR104a LD-FE-GL-BR104b LD-FE-GL-BR110 LD-FE-GL-BR111
Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR021a LD-FE-GL-BR021b LD-FE-GL-BR024 LD-FE-GL-BR104a LD-FE-GL-BR104b LD-FE-GL-BR140 LD-FE-GL-BR141
Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR021a LD-FE-GL-BR021b LD-FE-GL-BR104a LD-FE-GL-BR104b LD-FE-GL-BR113a LD-FE-GL-BR113b LD-FE-GL-BR114
Light-Duty	FE Label		Mfr	Back End	XML	

Light-Duty	FE Label		Mfr	Back End	XML	
Light-Duty	FE Label		Mfr	Back End	XML	
Light-Duty	FE Label		Manufacturer	Frontend	XML	LD-FE-GL-BR182
Light-Duty	FE Label		Manufacturer	Frontend	XML	LD-FE-GL-BR183

	Light-Duty	FE Label		Manufacturer	Frontend	XML	LD-FE-GL-BR184
	Light-Duty	FE Label		Verify	Backend	Assigned	
	Light-Duty	FE Label		Verify	Backend	Assigned	
	Light-Duty	FE Label		Verify	Backend	Assigned	
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR022a LD-FE-GL-BR022b LD-FE-GL-BR022c LD-FE-GL-BR023 LD-FE-GL-BR104a LD-FE-GL-BR104b LD-FE-GL-BR109 LD-FE-GL-BR110 LD-FE-GL-BR111

	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR022a LD-FE-GL-BR022b LD-FE-GL-BR022c LD-FE-GL-BR024 LD-FE-GL-BR104a LD-FE-GL-BR104b LD-FE-GL-BR139 LD-FE-GL-BR140 LD-FE-GL-BR141
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR025a LD-FE-GL-BR025b LD-FE-GL-BR104a LD-FE-GL-BR104b LD-FE-GL-BR112 LD-FE-GL-BR113a LD-FE-GL-BR113b LD-FE-GL-BR114 LD-FE-GL-BR115
				Mfr	Frontend	XML	LD-FE-GL-BR188
	Light-Duty	FE Label		Verify	Backend	Assigned	

Light-Duty	FE Label		Verify	Backend	Assigned	
Light-Duty	FE Label		Verify	Backend	Assigned	
Light-Duty	FE Label		Verify	Backend	Assigned	
Light-Duty	FE Label	This is a new field. Blended PHEVs have 2 fuel consumption values.	Manufacturer	Frontend	XML	LD-FE-GL-BR190 LD-FE-GL-BR191 LD-FE-GL-BR205
			Manufacturer	Frontend	XML	LD-FE-GL-BR162

		Light-Duty	FE Label	This is a new field. Adjusted Combined Model Type Fuel Consumption = 100 / "EPA-Calculated 5-Cycle Rounded Adjusted Model Type Final Label Combined FE Value" (GL-245) For fuel usage = electricity, enter the charge depleting fuel consumption (which is normally zero for electric vehicles and non-blended PHEVs, but may not be zero for blended PHEVs). For PHEVs enter the fuel consumption for gasoline or diesel fuel usage as appropriate. For fuel usage = hydrogen, enter fuel consumption in units of kilogram per 100 miles. Based on Adjusted Combined MPG. Rounding: ASTM round the result to one decimal place. Do not calculate for EVs or PHEVs (ie, where one of the Fuel Usage Values (GL-89) is not "EL") until EPA provides the final calculations.	Verify	Backend	Assigned	
1-999		Light-Duty	FE Label	Delete this field since it is now longer required by the regulations and since there are no values are in the database. EDIT: This field is still required because there is data in the database that has been submitted for this data element.	Mfr	Front End	XML	LD-FE-GL-BR026a LD-FE-GL-BR026b LD-FE-GL-BR147
1-999		Light-Duty	FE Label	Delete this field since it is now longer required by the regulations and since there are no values are in the database. EDIT: This field is still required because there is data in the database that has been submitted for this data element.	Mfr	Front End	XML	LD-FE-GL-BR026a LD-FE-GL-BR026b LD-FE-GL-BR189
1-999		Light-Duty	FE Label	Delete this field since it is now longer required by the regulations and since there are no values are in the database. EDIT: This field is still required because there is data in the database that has been submitted for this data element.	Mfr	Front End	XML	LD-FE-GL-BR026a LD-FE-GL-BR026b LD-FE-GL-BR187
1-999		Light-Duty	FE Label	Delete this field since it is now longer required by the regulations and since there are no values are in the database. EDIT: This field is still required because there is data in the database that has been submitted for this data element.	Mfr	Front End	XML	LD-FE-GL-BR026a LD-FE-GL-BR026b LD-FE-GL-BR186

Light-Duty	FE Label	'nnn' = Single range 'nnn/nnn' = Shortest and longest ranges for this model type that have available multiple fuel tank capacities.	Mfr	Front End	XML	LD-FE-GL-BR048 LD-FE-GL-BR116a LD-FE-GL-BR116b
Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR029 LD-FE-GL-BR181 LD-FE-GL-BR185
Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR030
Light-Duty	FE Label	This is a new field.	Mfr	Front End	XML	LD-FE-GL-BR178
Light-Duty	FE Label	This is a new field.	Mfr	Front End	XML	LD-FE-GL-BR178

Light-Duty	FE Label	This is a new field.	Mfr	Front End	XML	LD-FE-GL-BR176
Light-Duty	FE Label	This is a new field.	Mfr	Front End	XML	LD-FE-GL-BR173 LD-FE-GL-BR174
Light-Duty	FE Label	This is a new field.	Mfr	Front End	XML	LD-FE-GL-BR164
Light-Duty	FE Label	This is a new field.	Mfr	Front End	XML	LD-FE-GL-BR158
Light-Duty	FE Label	This is a new field. This will be a future calculation once EPA has the final calculation requirements. New business rules may need to be added in the future.	Verify	Backend	Assigned	
Light-Duty	FE Label	This is a new field.	Mfr	Front End	XML	

Verify Light-Duty Data Requirements

	Light-Duty	FE Label	This is a new field. This will be a future calculation once EPA has the final calculation requirements. New business rules may need to be added in the future.	Verify	Backend	Assigned
N - Not exempt T - Truck 1 - Unloaded GVWR > 6000 lbs (not applicable to limousines) 2 - Emergency Vehicle 3 - IRS Alternative Rate Schedule 5 - Vehicle can not operate on gasoline or diesel fuel	Light-Duty	FE Label		Mfr	Front End	XML
	Light-Duty	FE Label		Verify	Back End	Assigned
	Light-Duty	FE Label	Calculate model type mpg for gas guzzler indication as specified in 40 CFR 600.513 for each passenger automobile model type. Gas Guzzler calculation results should be submitted by manufacturers for non-exempt Gasoline and Diesel passenger vehicles only.	Manufacturer	Front End	XML	LD-FE-GL-BR138
Y = Yes N = No	Light-Duty	FE Label		Verify	Back End	Assigned
smission Class and Inertia Weight Class"						
	Light-Duty	FE Label	Assigned by Verify as a sequential incrementer for each base level (i.e. inertia weight class) entered by the mfr. Data elements GL-110 through GL-116 make this a repeating dataset.	Verify	Front End	XML

	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR052 LD-FE-GL-BR063 LD-FE-GL-BR064 LD-FE-GL-BR065 LD-FE-GL-BR066 LD-FE-GL-BR067 LD-FE-GL-BR068 LD-FE-GL-BR069 LD-FE-GL-BR070 LD-FE-GL-BR071 LD-FE-GL-BR072 LD-FE-GL-BR073 LD-FE-GL-BR074 LD-FE-GL-BR075 LD-FE-GL-BR076 LD-FE-GL-BR077
G = Gasoline (Regular Unleaded Recommended) GM = Gasoline (Mid Grade Unleaded Recommended) GMR = Gasoline (Mid Grade Unleaded Required) GP = Gasoline (Premium Unleaded Recommended) GPR = Gasoline (Premium Unleaded Required) D = Diesel, low sulfur (500 ppm) (obsolete after MY2006), DU = Diesel, ultra low sulfur (15 ppm, maximum) M = Methanol E = Ethanol (E85) CNG = Compressed Natural Gas LNG = Liquefied Natural Gas LPG = Liquid Petroleum Gas H = Hydrogen EL = Electricity BE = Battery Electric PE = Plug-in Hybrid Electric	Light-Duty	FE Label	Existing values of 'D' (Diesel, low sulfur (500 ppm)) are valid.	Mfr	Front End	XML	LD-FE-GL-BR049 LD-FE-GL-BR092 LD-FE-GL-BR094 LD-FE-GL-BR095 LD-FE-GL-BR096
	Light-Duty	FE Label		Mfr	Front End	XML	
	Light-Duty	FE Label		Mfr	Front End	XML	

Light-Duty	FE Label		Mfr	Front End	XML	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	

			Verify Light-Duty Data Requirements				
	Light-Duty	FE Label		Verify	Back End	Assigned	
d Transmission Configuration within a Base Level"							
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR036a LD-FE-GL-BR036b LD-FE-GL-BR053 LD-FE-GL-BR078
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR055
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR055
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR055
	Light-Duty	FE Label		Verify	Back End	Assigned	

		Verify Light-Duty Data Requirements				
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
, and road-load horse power, etc. within a configuration.						

	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR054 LD-FE-GL-BR192 LD-FE-GL-BR193
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR056 LD-FE-RL-BR004b
1000, 1125, 1250, 1375, 1500, 1625, 1750, 1875, 2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875, 3000, 3125, 3250, 3375, 3500, 3625, 3750, 3875, 4000, 4250, 4500, 4750, 5000, 5250, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500,10000, 10500, 11000, 11500, 12000, 12500, 13000, 13500, 14000	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR056 LD-FE-GL-BR062 LD-FE-GL-BR077
A = All altitude L = Low altitude only H = High altitude only	Light-Duty	FE Label		Mfr	Front End	XML	
	Light-Duty	FE Label		Verify	Back End	Assigned	
	Light-Duty	FE Label		Verify	Back End	Assigned	
	Light-Duty	FE Label		Verify	Back End	Assigned	

Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Verify	Back End	Assigned	
Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR206
, and road-load horse power, etc. within a configuration.						
Light-Duty	FE Label		Verify	Front End	XML	LD-FE-GL-BR059 LD-FE-GL-BR117 LD-FE-GL-BR201

Light-Duty	FE Label		Manufacturer	Front End	XML	LD-FE-GL-BR060 LD-FE-GL-BR117
Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR061 LD-FE-GL-BR117
Light-Duty	FE Label	TG-2	Mfr	Front End	XML	LD-FE-GL-BR034 LD-FE-GL-BR118 LD-FE-GL-BR119 LD-FE-GL-BR198 LD-FE-GL-BR203
Light-Duty	FE Label		Mfr	Front End	XML	
		Must be present when Subconfiguration Index (GL-121) is 1 to 49 and Configuration Index (GL-117) is 1 to 499 which indicates that the subconfiguration is represented by a tested vehicle; otherwise, must not present.				

							LD-FE-GL-BR035 LD-FE-GL-BR036a LD-FE-GL-BR036b LD-FE-GL-BR036c LD-FE-GL-BR036d LD-FE-GL-BR037 LD-FE-GL-BR037b LD-FE-GL-BR051 LD-FE-GL-BR057 LD-FE-GL-BR079 LD-FE-GL-BR087 LD-FE-GL-BR124 LD-FE-GL-BR125 LD-FE-GL-BR126 LD-FE-GL-BR127 LD-FE-GL-BR128 LD-FE-GL-BR129 LD-FE-GL-BR130 LD-FE-GL-BR131 LD-FE-GL-BR132 LD-FE-GL-BR142 LD-FE-GL-BR143 LD-FE-GL-BR144 LD-FE-GL-BR199
Light-Duty	FE Label	TI-1		Mfr	Front End	XML	LD-FE-GL-BR200
Light-Duty	FE Label	Find 'Vehicle ID' (TI-4) via Test Number (GL-127). TI-4 --> VI-2		Verify	Back End	Pre-existing data	LD-FE-GL-BR120
Light-Duty	FE Label	Find 'Vehicle Configuration Number' (TI-5) via Test Number (GL-127). TI-5 --> VI-3		Verify	Back End	Pre-existing data	LD-FE-GL-BR120

FTP = Federal Test Procedure
US06 = US06
SC03 = SC03
HWY = Highway NOx
EVAP = Evaporative
SPIT = Spitback
ORVR = On-board Refueling Vapor Recovery
NCNHE = Non-City, Non-Highway Exhaust
URBRNG = Urban Range
HWYRNG = Highway Range
AC-IDLE = A/C Idle Test
CD = Charge Depleting
EVAP-COMP = Evaporative - Component
EVAP-LEAK = Evaporative - Leak

Light-Duty | FE Label

This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number.

A valid test number is required for these test categories.

EVAP = 23, 27, 34, 38, 43, 47
FTP = 2, 11, 21, 25, 31, 35, 41, 45, 51, 52
HWY = 3
HWYRNG = 63
NCNHE = 9, 10, 72, 76
ORVR = 24, 32, 37, 44
SC03 = 95
SPIT = 15
URBRNG = 62
US06 = 16, 90, 96
A/C Idle = 60, 61, 87, 88
Charge Depleting = 81, 83, 84, 85, 86
EVAP-COMP = 64, 65
EVAP-LEAK = 66, 67, 68, 69

Verify | Back End | Pre-existing data

EL = Electricity CNG = Natural Gas D = Diesel E = Ethanol G = Gasoline H = Hydrogen LPG = LPG M = Methanol	Light-Duty	FE Label	EL= 62 CNG = 10, 41 D = 9, 19 E = 36, 37, 38, 43, 44, 45, 71 G = 1, 6, 7, 8, 22, 23, 24, 25, 26, 27, 61 H = 50 LPG = 42 M = 31, 32, 33, 34	Verify	Backend	Pre-existing data	
FTP75 = Federal Test Procedure (75 °F) FTP20 = Federal Test Procedure (20 °F) US06 = US06 SC03 = SC03 HWY = Highway Nox	Light-Duty	FE Label	This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories. FTP75 = 2, 21, 25, 31, 35, 41, 45 FTP20 = 11 HWY = 3 SC03 = 95 US06 = 90	Verify	Back End	Pre-existing data	LD-FE-GL-BR122 LD-FE-GL-BR123

N=No Y=Yes	Light-Duty	FE Label	The fuel economy values for this vehicle that represent a sub-configuration were generated by an EPA-approved analytically-derived method, in lieu of testing (ref: 40 CFR 600.006(e) and CCD-04-06). Notes: 1. # of ADFE must be no more than 20% of the subconfigurations tested 2. May not use any ADFE with a combined FE of less than 1.0 mpg above the gas Guzzler Tax $0 threshold (currently, 23.5 mpg) 3. May not use any ADFE with a combined fuel economy >= the leader in the applicable Carline class based on the previous model year's unadjusted general label values rounded to a whole mpg. TI-13.5	Verify	Back End	Pre-existing data	LD-FE-GL-BR133
N = No Y = Yes	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR079 LD-FE-GL-BR134
N = No averaging S = Simple averaging (Sum(i=1 to n) (FET(i) * WT(i))) H = Harmonic averaging (1/(Sum(i=1 to n) (FET(i) / WT(i)))	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR079 LD-FE-GL-BR088 LD-FE-GL-BR089 LD-FE-GL-BR136
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR038 LD-FE-GL-BR080 LD-FE-GL-BR081 LD-FE-GL-BR082 LD-FE-GL-BR083 LD-FE-GL-BR084 LD-FE-GL-BR086 LD-FE-GL-BR090 LD-FE-GL-BR091
	Light-Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR039 LD-FE-GL-BR085 LD-FE-GL-BR090 LD-FE-GL-BR091
	Light-Duty	FE Label		EPA	Back End	Assigned	

These are database only fields. This is the table used to perform EPA fuel cost calculations in GL-81.1 (to verify mfr's calculated annual fuel cost). The new model year uses the previous model year's fuel cost values until EPA determines and enters new updated fuel cost values.	Light-Duty	FE Label		EPA		Back End	Assigned	
These are database only fields.	Light-Duty	FE Label		EPA		Back End	Assigned	
These are database only fields. Old values for fuel cost for the same model year must be saved in the database.	Light-Duty	FE Label		EPA		Back End	Assigned	
These are database only fields. Old values for fuel cost for the same model year must be saved in the database.	Light-Duty	FE Label		EPA		Back End	Assigned	
	Light-Duty	FE Label		EPA		Backend	Assigned	
	Light-Duty	FE Label		EPA		Backend	Assigned	
	Light-Duty	FE Label		EPA		Backend	Assigned	
	Light-Duty	FE Label		EPA		Backend	Assigned	
These are database only fields. This is the table used to perform EPA derived 5-cycle label calculations. Any Model Year that does not have an entry in this table will use the last prior Model Year's coefficients.	Light-Duty	FE Label	These fields are entered by EPA no more than once per model year (they are not expected to change every year). Table should be initialized with 2008 Model Year value = 1.1805	EPA		Back End	Assigned	
These are database only fields. This is the table used to perform EPA derived 5-cycle label calculations. Any Model Year that does not have an entry in this table will use the last prior Model Year's coefficients.	Light-Duty	FE Label	These fields are entered by EPA no more than once per model year (they are not expected to change every year). Table should be initialized with 2008 Model Year value = 0.003259	EPA		Back End	Assigned	
These are database only fields. This is the table used to perform EPA derived 5-cycle label calculations. Any Model Year that does not have an entry in this table will use the last prior Model Year's coefficients.	Light-Duty	FE Label	These fields are entered by EPA no more than once per model year (they are not expected to change every year). Table should be initialized with 2008 Model Year value = 1.3466	EPA		Back End	Assigned	
These are database only fields. This is the table used to perform EPA derived 5-cycle label calculations. Any Model Year that does not have an entry in this table will use the last prior Model Year's coefficients.	Light-Duty	FE Label	These fields are entered by EPA no more than once per model year (they are not expected to change every year). Table should be initialized with 2008 Model Year value = 0.001376	EPA		Back End	Assigned	

Tier 3 Update (Release 15.0)

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits
Certificate Request Information												
CR-0.5	Process Code	Select the desired process code for the current submission.	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails	RequestProcessCode	1		A(1)	Enumeration	1	1		
CR-1	Manufacturer Code	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account.	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ManufacturerSpecificDetails	EPAManufacturerCode	1		A(3)	String	3	3	[A-Z0-9]{3}	
CR-3	Model Year	Enter the applicable model year for this test group.	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ManufacturerSpecificDetails	ModelYear	1		N(4)	Number	4	4		
CR-4	Test Group	Enter the applicable test group name for the Certificate Request.	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ManufacturerSpecificDetails	TestGroupName	1		A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}([\.] [A-Z0-9]{1,6})?	
CR-5	Evaporative/Refueling Family Name	Enter the applicable evaporative/refueling family name for this Certificate Request.	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ManufacturerSpecificDetails	EvaporativeRefuelingFamilyName	0		A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4}[0-9]{4}[A-Z0-9]{3}	
CR-7	Commerce Introduction Date	Enter the date this Test Group will be entered into commerce.	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ManufacturerSpecificDetails	CommerceIntroductionDate	0		Date (YYYYMMDD)				[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}	
CR-9	Meet All Applicable Standards Indicator	Do all the tested vehicles meet all the applicable standards?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	MeetAllApplicableStandardsIndicator	0			Enumeration				
CR-10	Meet All Applicable Requirements Indicator	Does this test group/evaporative family comply with all the applicable requirements of 40 CFR Parts 85, 86, 88, 600, 1037, 1065, 1066 and other regulations which may apply?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	MeetAllApplicableRequirementsIndicator	0			Enumeration				
CR-11	OBD System Approval Indicator	Has the OBD system for this test group/evaporative family been approved by EPA or CARB?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	OBDSystemApprovalIndicator	0			Enumeration				

CR-12	**CARB Executive Order Issued Indicator**	If this a California only Test Group have you received the applicable CARB executive order?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	CARBExecutiveOrderIssuedIndicator	0			Enumer ation			
CR-13	**CARB Executive Order Number**	If yes, what is the executive order number?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	CARBExecutiveOrderNumberText	0			String	1	15	
CR-14	**ORVR System Approval Indicator**	Has the safety of the ORVR system for this evaporative/refueling family been approved by EPA?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	ORVRSystemApprovalIndicator	0			Enumer ation			
CR-15	**Compliance Fee Paid Indicator**	Has the full amount of the applicable certification fees been paid for this test group?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	ComplianceFeePaidIndicator	0			Enumer ation			
CR-16	**No Defeat Device Indicator**	Are the vehicles covered by this test group/evaporative family free of defeat devices and strategies?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	NoDefeatDeviceIndicator	0			Enumer ation			
CR-22	**GHG Pre-Model Year Report Indicator**	Has the green house gas pre-model year report been submitted to EPA for this model yearand does it meet all requirements 40 CFR 600.514 or 40 CFR 1037.104?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	PreModelYearReportIndicator	0			Enumer ation			
CR-17	**CAP2000 Conditional Certificate**	Does this test group and evaporative family need a CAP 2000 conditional certificate because EPA confirmatory testing is pending (i.e., a test has been scheduled with EPA but has not occurred at the time a certificate is being requested?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	CAP2000ConditionalIndicator	0			Enumer ation			
CR-18	**Independent Commercial Importer Certificate**	Is this an Independent Commercial Importer (ICI) certificate?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	ICICertificateIndicator	0			Enumer ation			
CR-19	**Alternate Fuel Converter Certificate**	Is this an alternative fuel converter certificate?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	AlternateFuelConverterCertificateIndicator	0			Enumer ation			
CR-20	**Certificate Locking Comment**	Enter any comments for this certificate locking request.	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	LockCommentText	0		A(1000)	String	1	1000	
CR-21	**New Certificate Needed**	Is a revised certificate needed?	CertificateRequestSubmissionInformation/ CertificateRequestInformationDetails/ApplicationSpecificDetails	RevisedCertificateIndicator	0			Enumer ation			

Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
			N = New U = Unlock Request L = Lock Request I = Introduction Into Commerce Date Update	Light-Duty	Certification		Manufacturer	Front End	XML	
				Light Duty	Certification		Verify	Front End	XML	LD-CERT-CR-BR019 LD-CERT-CR-BR020a LD-CERT-CR-BR020b LD-CERT-CR-BR020c
	1957	2100		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR001 LD-CERT-CR-BR002 LD-CERT-CR-BR019 LD-CERT-CR-BR026 LD-CERT-CR-BR027 LD-CERT-CR-BR028
				Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR001 LD-CERT-CR-BR002 LD-CERT-CR-BR016 LD-CERT-CR-BR017 LD-CERT-CR-BR019 LD-CERT-CR-BR021 LD-CERT-CR-BR022 LD-CERT-CR-BR030
				Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR001 LD-CERT-CR-BR016 LD-CERT-CR-BR017 LD-CERT-CR-BR019 LD-CERT-CR-BR021
				Light Duty	Certification	Is this being moved to Testgroup Info?	Manufacturer	Front End	XML	LD-CERT-CR-BR011 LD-CERT-CR-BR012
			Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018
			Y = Yes N = No	Light Duty	Certification	**CSC: Only the front-end Cert Request question text needs to be changed (see description)**	Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018
			Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018

Verify Light-Duty Data Requirements

						If "NA" is selected, Verify should treat it as a "Yes" and this should not block the certificate from being issued.				
			Y = Yes N = No NA = Not Applicable	Light Duty	Certification	If "NA" is selected, Verify should treat it as a "Yes" and this should not block the certificate from being issued.	Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018
				Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR015
			Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018
			Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR031
			Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018
			Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR024
			Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012
			Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012
			Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012
				Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR013
			Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR014 LD-CERT-CR-BR029

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern
		New dataset for "Roadload Information". This dataset will be due after the FE Label dataset since this dataset references model type information that is collected in the FE Label dataset. Some of the fields will be pulled in from the FE Label dataset based on the Model Type Index and Subconf...									
RL-0.5	Process Code	Select the desired process code for the current road load entry submission.	RoadLoadDataSubmission/RoadLoadDetails	InformationProcessCode	1	1 per Road Load	A(1)	Enumeration			
RL-1	Manufacturer Code	The three character code assigned by EPA to each manufacturer. This will be derived from users' CDX account.	RoadLoadDataSubmission/RoadLoadDetails	EPAManufacturerCode	1	1 per Road Load	A(3)	String	3	3	[A-Z0-9]{3}
RL-1.5	Road Load Index	The Verify-assigned unique index number for this road load submission.	RoadLoadDataSubmission/RoadLoadDetails	RoadLoadIndexNumber	1	1 per Road Load	N(5)	Integer			
RL-1.6	Model Year	Enter the model year for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	ModelYear	1	1 per Road Load	N(4)	Integer			
RL-1.7	FE Label Subconfiguration Reference Indicator	Does this road load data reference an existing FE Label subconfiguration?	RoadLoadDataSubmission/RoadLoadDetails	FuelEconomyLabelSubconfigurationReferenceIndicator	1	1 per Road Load	A(1)	Enumeration			
RL-1.8	FE Label Manufacturer Code	Enter the manufacturer code of the manufacturer who submitted the FE Label.	RoadLoadDataSubmission/RoadLoadDetails	FuelEconomyLabelManufacturerCode	1	1 per Road Load	A(3)	String	3	3	[A-Z0-9]{3}
RL-2	FE Label Model Type Index	Enter the Manufacturer-assigned index number for the model type for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	ModelTypeIndexNumber	1	1 per Road Load	N(3)	Integer			
RL-2.1	FE Label Base Level Index	For this set of road load data, enter the applicable FE Label Base Level index number if this subconfiguration was used in an FE label; otherwise, leave this field blank if the subconfiguration will be used in a future GHG/CAFE dataset.	RoadLoadDataSubmission/RoadLoadDetails/FuelEconomyLabelSubConfigurationInformationDetailsT	BaseLevelIndexNumber	0	1 per Road Load	N(2)	Integer			
RL-2.2	FE Label Configuration Index	For this set of road load horsepower data, enter the applicable FE Label Configuration index number if this subconfiguration was used in an FE Label; otherwise, leave this field blank if the subconfiguration will be used in a future GHG/CAFE dataset.	RoadLoadDataSubmission/RoadLoadDetails/FuelEconomyLabelSubConfigurationInformationDetailsT	ConfigurationIndexNumber	0	1 per Road Load	N(3)	Integer			
RL-3	FE Label Subconfiguration Index	For this set of road load horsepower data, enter the applicable FE Label subconfiguration index number if this subconfiguration was used in an FE label, otherwise leave this field blank if the subconfiguration will be used in a future GHG/CAFE dataset.	RoadLoadDataSubmission/RoadLoadDetails/FuelEconomyLabelSubConfigurationInformationDetails	SubConfigurationIndexNumber	0	1 per Road Load	N(2)	Integer			
RL-3.5	Release Date	The date this model type information can be released to the public.	NA	NA	1	1 per Road Load		Date (YYYYMMDD)			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}

ID	Field	Description	XPath	Element	Req	Occurrence	Format	Type	Min	Max	Pattern
			Verify Light-Duty Data Requirements								
RL-4	Test Group	Enter the applicable test group name assigned by the manufacturer if this subconfiguration was not used in an FE Label; otherwise, leave this field blank.	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadSubConfigurationInformationDetails	TestGroupName		1..n per Road Load	A(12)	String	12	12	
RL-5	Engine Code	Enter the applicable engine code assigned by the manufacturer if this subconfiguration was not used in an FE Label; otherwise, leave this field blank.	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadSubConfigurationInformationDetails	EngineCodeText		1 per Road Load	A(14)	String	1	14	
RL-5.1	Equivalent Engine Code(s)	Enter all applicable equivalent engine codes for the engine code for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadDataDetails	EquivalentEngineCodeText	1	1..n per Engine Code per Road Load	A(14)	String	1	14	
RL-6	In-Use Engine Code Decoder	Enter a description of the engine code for this road load entry that distinguishes it from similar engine codes per 600.512-12(c)(11).	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadDataDetails	InUseEngineCodeDescriptionText	1	1 per Road Load	A(500)	String	1	500	
RL-7	Displacement	Enter the applicable engine displacement in liters for this road load entry if this subconfiguration was not used in an FE Label; otherwise, leave this field blank.	NA	NA		1 per Road Load	N(5,3)	Decimal			
RL-8	Carline Manufacturer Code	Enter the applicable manufacturer code for this road load entry.	NA	NA	1	1 per Road Load	A(3)	String	3	3	[A-Z0-9]{3}
RL-9	Carline Division Code	Enter the applicable carline division code for this road load entry.	NA	NA	1	1 per Road Load	N(2)	Integer	1	2	
RL-9.1	Carline Division Name	Enter the applicable carline division name for this road load entry.	NA	NA	1	1 per Road Load	N(2)	Integer	1	2	
RL-10	Carline Code	Enter the applicable carline code for this road load entry.	NA	NA	1	1 per Road Load	N(3)	Integer	1	3	
RL-10.1	Carline Name	Enter the applicable carline name for this road entry.	NA	NA	1	1 per Road Load	A(32)	Normalized string	1	32	
RL-11	Drive system	Enter the applicable drive system for this road load entry.	NA	NA	1	1 per Road Load	A(1)	Enumeration			
RL-12	Transmission Type	Enter the transmission type for this road load entry.	NA	NA	1	1 per Road Load	A(3)	Enumeration			
RL-13	Number of Transmission Gears	The number of transmission gears on this road load entry. If this vehicle is equipped with a "transmission type" of "CVT", enter "1" for the number of gears.	NA	NA	1	1 per Road Load	N(2)	Integer			

RL-14	**Transmission as listed in the FE Guide**	Verify-determined Transmission Class for this road load entry based on the values for Transmission Type and Number of Transmission Gears.	NA	NA	1	1 per Road Load	A(12)	Enumeration			
RL-15	**Axle Ratio**	Enter the axle ratio for this test vehicle road load entry if this subconfiguration was not used in an FE Label; otherwise, leave this field blank.	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadSubConfigurationInformationDetails	AxleRatioValue		1 per Road Load	N(3,2)	Decimal			
RL-16	**Rim and tire size**	Enter the standard tire/rim size description as imprinted on the side wall of the tire for this road load entry	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadDataDetails	RimAndTireSizeDescriptionText	1	1 per Road Load	A(20)	String	1	20	
RL-17	**Tire Type**	Select the applicable tire type for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadDataDetails	TireTypeIdentifier	1	1 per Road Load	A(3)	Enumeration			
RL-18	**Tire Manufacturer**	Enter the tire manufacturer for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadDataDetails	TireManufacturerName	1	1 per Road Load	A(25)	String	1	25	
RL-19	**N/V Ratio**	Enter the applicable N/V ratio for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadDataDetails	NVRatioValue	1	1 per Road Load	N(4,1)	Decimal			
RL-20	**Curb Weight**	Enter the curb weight in pounds for this road load entry. Curb weight is defined as the actual or mfr's estimated weight of the vehicle in operational status with all standard equipment and weight of fuel at nominal tank capacity and the weight of optional equipment computed in accordance with CFR86.082-24.	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadDataDetails	CurbWeightValue	1	1 per Road Load	N(5)	Integer			
RL-21	**ETW**	Select the equivalent test weight (ETW) in pounds for this road load entry if this subconfiguration was not used in an FE label; otherwise, leave this field blank.	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadSubConfigurationInformationDetails	EquivalentTestWeightValue	FALSE	1 per Road Load	N(5)	Integer / Enumeration			
RL-22	**Manufacturer-Calculated Total Road Load Horsepower**	Enter the total road load horsepower at 50 mph (TRLHP50) for this subconfiguration if this subconfiguration was not used in an FE label, otherwise leave this field blank.	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadSubConfigurationInformationDetails	TotalRoadLoadHorsepowerValue		1 per Road Load	N(3,1)	Decimal			

RL-23	**Verify-Calculated Total Road Load Horsepower**	The total road load horsepower at 50 mph (TRLHP50) as calculated by Verify for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails/ EPAGeneratedDataDetails	TotalRoadLoadHorsepowerValue	1	1 per Road Load	N(3,1)	Decimal			
RL-24	**Target Coefficient A (F0) (lbf)**	Enter the target A-term coefficient from test track force vs. velocity equation for this road load entry. (lbf)	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadDataDetails	TargetCoefficientAValue	1	1 per Road Load	N(6,3)	Decimal			
RL-25	**Target Coefficient B (F1) (lbf/mph)**	Enter the target B-term coefficient from test track force vs. velocity equation for this road load entry. (lbf/mph)	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadDataDetails	TargetCoefficientBValue	1	1 per Road Load	N(6,5)	Decimal			
RL-26	**Target Coefficient C (F2) (lbf/mph**2)**	Enter the target C-term coefficient from test track force vs. velocity equation for this road load entry. (lbf/mph**2)	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadDataDetails	TargetCoefficientCValue	1	1 per Road Load	N(7,6)	Decimal			
RL-27	**Road Load Determination Method**	Select the applicable road load determination method for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails/ RoadLoadDataDetails	RoadLoadDeterminationIdentifier	1	1 per Road Load	A(10)	Enumeration			
RL-28	**Deletion Reason**	Enter the reason this report is being deleted.	RoadLoadDataSubmission/ RoadLoadReportDeleteDetails	DeletionReportReasonText	0	1 per Road Load	A(500)	String	1	500	

Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
figuration Index entered by the manufacturer in the road load dataset and then the manufacturer will enter another 12 fields and Verify will calculate 2 fields.											
				N = New dataset C = Correction of existing Verify dataset	Light Duty	Road Load		Manufacturer	Front End	XML	
					Light Duty	Road Load		Manufacturer	Front End	XML	LD-FE-RL-BR001 LD-FE-RL-BR002
		1	99999		Light Duty	Road Load		Verify	Front End	XML	LD-FE-RL-BR003 LD-FE-RL-BR005 LD-FE-RL-BR016
					Light Duty	Road Load		Manufacturer	Front End	XML	LD-FE-RL-BR003 LD-FE-RL-BR005 LD-FE-RL-BR006 LD-FE-RL-BR016
				Y = Yes N = No	Light Duty	Road Load		Manufacturer	Front End	XML	
					Light Duty	Road Load		Manufacturer	Front End	XML	LD-FE-RL-BR003 LD-FE-RL-BR005 LD-FE-RL-BR006 LD-FE-RL-BR008 LD-FE-RL-BR009 LD-FE-RL-BR010 LD-FE-RL-BR016
		1	999		Light Duty	Road Load		Manufacturer	Front End	XML	LD-FE-RL-BR003 LD-FE-RL-BR005 LD-FE-RL-BR006 LD-FE-RL-BR016
		1	99		Light Duty	Road Load	Assigned by Verify as a sequential incrementer for each base level (i.e. inertia weight class) entered by the mfr. Data elements GL-110 through GL-116 make this a repeating dataset.	Manufacturer	Front End	XML	LD-FE-RL-BR007 LD-FE-RL-BR011
3	0	1	999		Light Duty	Road Load		Manufacturer	Front End	XML	LD-FE-RL-BR007 LD-FE-RL-BR011
2		1	99		Light Duty	Road Load		Manufacturer	Front End	XML	LD-FE-RL-BR007 LD-FE-RL-BR011
					Light Duty	Road Load	GL-176	Verify	Back End	Pre-existing	

								Verify Light-Duty Data Requirements			
					Light Duty	Road Load	GL-126	Verify or Manufacturer	Back End or Front End	Pre-existing or XML	New LD-FE-RL-BR012 New LD-FE-RL-BR013 New LD-FE-RL-BR017
					Light Duty	Road Load	GL-119	Verify or Manufacturer	Back End or Front End	Pre-existing or XML	LD-FE-RL-BR013
					Light Duty	Road Load		Manufacturer	Front End	XML	
					Light Duty	Road Load		Manufacturer	Front End	XML	
5	3	0.001	99.999		Light Duty	Road Load				Pre-existing	
					Light Duty	Road Load	GL-125.5	Verify	Back End	Pre-existing	
		1	99		Light Duty	Road Load	GL-125.6	Verify	Back End	Pre-existing	
		1	99		Light Duty	Road Load	Pulled in from Division table using Division Code	Verify	Back End	Pre-existing	
		1	999		Light Duty	Road Load	GL-125.7	Verify	Back End	Pre-existing	
		~~1~~	~~999~~		Light Duty	Road Load	CL-6	Verify	Back End	Pre-existing	
				4 = 4-wheel Drive F = 2-wheel Drive, front R = 2-wheel drive, rear P= Part-time 4-wheel drive A = All wheel drive	Light Duty	Road Load	GL-72	Verify	Back End	Pre-existing	
				A = Automatic AM = Automated Manual M = Manual SA = Semi-Automatic CVT= Continuously Variable SCV=Selectable Continuously Variable (e.g. CVT with paddles) AMS= Automated Manual-Selectable (e.g. Automated Manual with paddles) OT = Other	Light Duty	Road Load	GL-67	Verify	Back End	Pre-existing	
		1	99		Light Duty	Road Load	GL-71	Verify	Back End	Pre-existing	

Verify Light-Duty Data Requirements

				Determined by Verify from GL-67 (Transmission Type) and GL-71 (Total number of Transmission Gears) as follows: If GL-67 is: A= "Auto(AX)" AM = "Auto(AMX)" M = "Manual(MX)" SA = "Auto(SX)" CVT= "Auto(AV)" SCV= "Auto(AV-SX)" OT = "Other(OT-X)" Derived field is in quotes-- where: X is the total number of forward gears listed in GL-71.	Light Duty	Road Load		Verify	Back End	Pre-existing	
3	2	0	9.99		Light Duty	Road Load	GL-120	Verify or Manufacturer	Back End or Front End	Pre-existing or XML	LD-FE-RL-BR013
					Light Duty	Road Load		Manufacturer	Front End	XML	
				-ALS = All Season -AT = All Terrain -HPR = High Performance -LRR = Low Rolling Resistance -RF = Run Flat	Light Duty	Road Load		Manufacturer	Front End	XML	
					Light Duty	Road Load		Manufacturer	Front End	XML	
4	1	0	999.9		Light Duty	Road Load		Manufacturer	Front End	XML	
		0	14000		Light-Duty	Road Load	S. Devarapalli confirming whether the first business rule is necessary (depending on whether ETW and Curb Weight are front end or back end fields).	Manufacturer	Front end	XML	
		0	14000	1000, 1125, 1250, 1375, 1500, 1625, 1750, 1875, 2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875, 3000, 3125, 3250, 3375, 3500, 3625, 3750, 3875, 4000, 4250, 4500, 4750, 5000, 5250, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500,10000, 10500, 11000, 11500, 12000, 12500, 13000, 13500, 14000	Light Duty	Road Load	GL-123 S. Devarapalli confirming whether the first business rule is necessary (depending on whether ETW and Curb Weight are front end or back end fields).	Verify or Manufacturer	Back End or Front End	Pre-existing or XML	LD-FE-RL-BR013
3	1	0	99.9		Light Duty	Road Load	GL-122	Verify or Manufacturer	Back End or Front End	Pre-existing or XML	LD-FE-RL-BR004a LD-FE-RL-BR004b LD-FE-RL-BR013

								Verify	Light-Duty Data Requirements		
3	1	0	99.9		Light Duty	Road Load	Calculation = (a+50*b+2500*c)/7.5	Verify	Back End	Assigned	LD-FE-RL-BR004a LD-FE-RL-BR004b
6	3	-999.999	999.999		Light Duty	Road Load		Manufacturer	Front End	XML	
6	5	-9.99999	9.99999		Light Duty	Road Load		Manufacturer	Front End	XML	
7	6	-9.999999	9.999999		Light Duty	Road Load		Manufacturer	Front End	XML	
				-Calculated (Vehicle not coasted down on track) -Measured (Actual vehicle coasted down on track)	Light Duty	Road Load		Manufacturer	Front End	XML	
					Light Duty	Road Load		Manufacturer	Front End	XML	LD-FE-RL-BR015

Release TBD																
EPA Data Element Number	**Long Name**	**Description**	**Parent's Name**	**XML Tag**	**Required**	**Multiplicity**	**Basic Data Type**	**Data Type Description**	**Min Length**	**Max Length**	**Pattern**	**Total Digits**	**Fractional Digits**	**Min Value**	**Max Value**	**Allowed Values**	**Industry**
This new footprint dataset will be required for trucks beginning with model year 2010 and for cars beginning with model year 2011.																	
FT-0.5	Process Code	Select the desired process code for the current footprint entry submission.	FootprintDataSubmission/ FootprintDataDetails	InformationProcessCode	1	1 per footprint submission	A(1)	Enumeration								N = New dataset C = Correction of existing Verify dataset	Light Duty
FT-0.7	Submitter Manufacturer Code	The 3-character alphanumeric code assigned by EPA to each manufacturer. For mfr tests- this will be derived from user's CDX user account. Otherwise, it will come from LOD Test Report data.	FootprintDataSubmission/ FootprintDataDetails	EPAManufacturerCode	1		A(3)	Fixed string	3	3	[A-Z0-9]{3}						Light-Duty
FT-1	Carline Manufacturer Code	Enter the 3-character alphanumeric code assigned by EPA to each manufacturer for the carline for which footprint information is being submitted.	FootprintDataSubmission/ FootprintDataDetails	CarlineManufacturerCode	1	1 per footprint submission	A(3)	Fixed string	3	3	[A-Z0-9]{3}						Light Duty
FT-2	Model Year	Enter the applicable model year for this carline for which footprint information is being submitted.	FootprintDataSubmission/ FootprintDataDetails	ModelYear	1	1 per footprint submission	N(4)	Integer						1957	2100		Light Duty
FT-3	Division Code	Enter the applicable division for this carline for which footprint information is being submitted.	FootprintDataSubmission/ FootprintDataDetails	ManufacturerDivisionCode	1	1 per footprint submission	N(2)	Integer						1	99		Light Duty
FT-4	CarLine Code	Enter the applicable carline code (assigned by the manufacturer) for this carline for which footprint information is being submitted.	FootprintDataSubmission/ FootprintDataDetails	CarlineCode	1	1 per footprint submission	N(3)	Integer						1	999		Light Duty
FT-5	Footprint Index	Verify-generated footprint index assigned to each footprint within a carline.	FootprintDataSubmission/ FootprintDataDetails/ FootprintIndexDetails	FootprintIndexNumber	1	1..n for each footprint submission	N(2)	Integer				2	0	1	99		Light Duty

FT-6	**Footprint Description**	Enter the manufacturer's model type and footprint description (e.g. "super cab, 4WD, long bed, Dooley"; "super cab, 2WD, short bed", etc.) . Repeat for each footprint within this carline.	FootprintDataSubmission/ FootprintDataDetails/ FootprintIndexDetails	FootprintDescription Text	1	1 per footprint index per footprint submission	A(300)	String	1	300							Light Duty
FT-37	**Footprint Vehicle Type**	Enter the vehicle type of the carline for this footprint.	FootprintDataSubmission/ FootprintDataDetails/ FootprintIndexDetails	FootprintVehicleTyp eIdentifier	0	1 per footprint index per footprint submission	A(2)	Enumeration								PV = Passenger Vehicle LT = Light Truck	Light Duty
FT-7	**Wheel base (inches)**	Enter the wheel base of this footprint for this carline measured in inches and rounded to one tenth of an inch.	FootprintDataSubmission/ FootprintDataDetails/ FootprintIndexDetails	WheelBaseValue	1	1 per footprint index per footprint submission	N(5,1)	Decimal				5	1	0.1	9999.9		Light Duty
FT-8	**Front Track Width (inches)**	Enter the front track width of this footprint for this carline measured in inches and rounded to one tenth of an inch.	FootprintDataSubmission/ FootprintDataDetails/ FootprintIndexDetails	FrontTrackWidthVal ue	1	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty
FT-9	**Rear Track Width (inches)**	Enter the rear track width of this footprint for this carline measured in inches and rounded to one tenth of an inch.	FootprintDataSubmission/ FootprintDataDetails/ FootprintIndexDetails	RearTrackWidthValu e	1	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty
FT-10	**Manufacturer-Calculated Footprint Rounded to One Decimal Place (square feet)**	The Manufacturer-calculated area of this footprint for this carline according to the footprint definition specified in 49 CFR 523.2.	FootprintDataSubmission/ FootprintDataDetails/ FootprintIndexDetails	FootprintAreaMeasu re	1	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty
FT-11	**EPA-Calculated Footprint Rounded to One Decimal Place (square feet)**	The Verify-calculated area of this footprint for this carline according to the footprint definition specified in 49 CFR 523.2.	FootprintDataSubmission/ FootprintDataDetails/ EPAGeneratedDataDetails/ EPAGeneratedFootprintDet ails/ EPAGeneratedFootprintInde xResults	EPAFootprintAreaM easure	1	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty
FT-12	**Discrepancy of Manufacturer and EPA-Calculated Footprint**	The Verify-calculated absolute value of the discrepancy of the manufacturer and EPA-calculated footprint.	FootprintDataSubmission/ FootprintDataDetails/ EPAGeneratedDataDetails/ EPAGeneratedFootprintDet ails/ EPAGeneratedFootprintInde xResults	ManufacturerEPAFo otprintAreaMeasure DiscrepancyValue	1	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0	999.9		Light Duty
FT-13	**Manufacturer Footprint Target FE Value Rounded to Two Decimal Places (miles per gallon)**	Enter the manufacturer-calculated target fuel economy value (in miles per gallon) of this footprint for this model type.	FootprintDataSubmission/ FootprintDataDetails/ EPAGeneratedDataDetails/ EPAGeneratedFootprintDet ails/ EPAGeneratedFootprintInde xDetails	ManufacturerTarget FuelEconomyValue	1	1 per footprint index per footprint submission	N(5,2)	Decimal				5	2	0.01	999.99		Light Duty
FT-14	**EPA Footprint Target FE Value Rounded to Two Decimal Places (miles per gallon)**	The EPA-calculated target fuel economy value (in miles per gallon) of this footprint.	FootprintDataSubmission/ FootprintDataDetails/ EPAGeneratedDataDetails/ EPAGeneratedFootprintDet ails/ EPAGeneratedFootprintInde xResults	EPATargetFuelEcon omyValue	1	1 per footprint index per footprint submission	N(5,2)	Decimal				5	2	0.01	999.99		Light Duty

ID	Name	Description	XML Path	Field Name		Verify Light-Duty Data Requirements		Format	Type				Length	Decimals	Min	Max		Category
FT-15	Footprint Target FE Discrepancy Value	The EPA-calculated absolute value of the discrepancy between the manufacturer and EPA Target FE values.	FootprintDataSubmission/ FootprintDataDetails/ EPAGeneratedDataDetails/ EPAGeneratedFootprintDetails/ EPAGeneratedFootprintIndexResults	ManufacturerEPATargetFuelEconomyDiscrepancyValue	1	1 per footprint index per footprint submission		N(5,2)	Decimal				5	2	0	999.99		Light Duty
FT-16	Manufacturer Footprint Target GHG Value Rounded to One Decimal Place (grams per mile)	Enter the manufacturer-calculated target greenhouse gas value (in miles per gallon) of this footprint for this model type.	FootprintDataSubmission/ FootprintDataDetails/ EPAGeneratedDataDetails/ EPAGeneratedFootprintDetails/ EPAGeneratedFootprintIndexDetails	ManufacturerTargetGreenhouseGasValue	0	1 per footprint index per footprint submission		N(4,1)	Decimal				4	1	0	999.9		Light Duty
FT-17	EPA Footprint Target GHG Value Rounded to Two Decimal Places (grams per mile)	The EPA-calculated target greenhouse gas value (in miles per gallon) of this footprint.	FootprintDataSubmission/ FootprintDataDetails/ EPAGeneratedDataDetails/ EPAGeneratedFootprintDetails/ EPAGeneratedFootprintIndexResults	EPATargetGreenhouseGasValue	0	1 per footprint index per footprint submission		N(4,1)	Decimal				4	1	0	999.9		Light Duty
FT-18	Footprint Target GHG Discrepancy Value	The EPA-calculated absolute value of the discrepancy between the manufacturer and EPA Target GHG values.	FootprintDataSubmission/ FootprintDataDetails/ EPAGeneratedDataDetails/ EPAGeneratedFootprintDetails/ EPAGeneratedFootprintIndexResults	ManufacturerEPATargetGreenhouseGasDiscrepancyValue	1	1 per footprint index per footprint submission		N(4,1)	Decimal				4	1	0.1	999.9		Light Duty
This is an EPA-Only database table that needs to be created. EPA will need to enter these coefficients into the database tables before the CAFE and GHG calculations can be completed																		
FT-19	Footprint Coefficient Model Year	The applicable model year for each set of CAFE and GHG coefficients.	NA	NA	1	1	N(4)	Year	4	4			4	0	2008	2100		
FT-20	CAFE Footprint Target Minimum Domestic Passenger Vehicle Standard	EPA entered minimum allowed value for final Average Target FE calculation result. Applies to Domestically manufactured Passenger Vehicles only.	NA	NA	1	1 per model year	N(5,1)	Decimal					5	1	0	9999.9		
FT-21	CAFE Footprint Passenger Vehicle Coefficient A	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1	1 per model year	N(11,7)	Decimal					11	7	0	9999.9999999		
FT-22	CAFE Footprint Passenger Vehicle Coefficient B	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1	1 per model year	N(11,7)	Decimal					11	7	0	9999.9999999		
FT-23	CAFE Footprint Passenger Vehicle Coefficient C	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1	1 per model year	N(11,7)	Decimal					11	7	0	9999.9999999		
FT-24	CAFE Footprint Passenger Vehicle Coefficient D	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1	1 per model year	N(11,7)	Decimal					11	7	0	9999.9999999		
FT-25	CAFE Footprint Light Truck Coefficient A	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1	1 per model year	N(11,7)	Decimal					11	7	0	9999.9999999		
FT-26	CAFE Footprint Light Truck Coefficient B	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1	1 per model year	N(11,7)	Decimal					11	7	0	9999.9999999		
FT-27	CAFE Footprint Light Truck Coefficient C	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1	1 per model year	N(11,7)	Decimal					11	7	0	9999.9999999		
FT-28	CAFE Footprint Light Truck Coefficient D	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1	1 per model year	N(11,7)	Decimal					11	7	0	9999.9999999		
FT-29	GHG Footprint Passenger Vehicle Coeffecient A	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1	1 per model year	N(11,7)	Decimal					11	7	0	9999.9999999		
FT-30	GHG Footprint Passenger Vehicle Coeffecient B	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1	1 per model year	N(11,7)	Decimal					11	7	0	9999.9999999		
FT-31	GHG Footprint Passenger Vehicle Coeffecient C	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1	1 per model year	N(11,7)	Decimal					11	7	0	9999.9999999		

FT-32	GHG Footprint Passenger Vehicle Coeffecient D	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999		
FT-33	GHG Footprint Light Truck Coeffecient A	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999		
FT-34	GHG Footprint Light Truck Coeffecient B	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999		
FT-35	GHG Footprint Light Truck Coeffecient C	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999		
FT-36	GHG Footprint Light Truck Coeffecient D	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.	NA	NA	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999		
NHTSA CAFE Vehicle Classification Information																
FT-40	**Front Base Tire Code**	Enter the U.S. DOT tire code of the Front Base Tire for this footprint, e.g. P245/35ZR19, P155/60R18, LT225/75R16.			1	1 per footprint index per footprint submission	A(20)	String	5	20	string must include ('R', 'r', 'D', 'd','B', or 'b') && '/'					Light Duty
FT-41	**Rear Base Tire Code**	Enter the U.S. DOT tire code of the Rear Base Tire for this footprint, e.g. P285/30ZR20, P155/60R18, LT225/75R16.			1	1 per footprint index per footprint submission	A(20)	String	5	20	string must include ('R', 'r', 'D', 'd','B', or 'b') && '/'					Light Duty
FT-42	**NHTSA CAFE Vehicle Classification**	Select **one** of the following numeric codes indicating the **primary** reason why the vehicle with this footprint is classified as a passenger car or light truck according for NHTSA CAFE purposes, ref. 49 CFR 523.5, as follows: Enter "**0**" for passenger cars; Enter "**1**" if vehicle can tranport more than 10 persons; ref. 49 CFR 523.5 (a)(1); Enter "**2**" if vehicle can provide temporary living quarters; ref. 49 CFR 523.5 (a)(2); Enter "**3**" if vehicle can transport property on an open bed; ref. 49 CFR 523.5 (a)(3); Enter "**4**" if vehicle provides greater cargo-carrying volume than passenger-carrying volume; ref. 49 CFR 523.5 (a)(4); Enter "**5**" if vehicle provides expanded use of cargo carrying purposes as outlined in 49 CFR 523.5 (a)(5) and (a)(5)(ii); Enter "**6**" if vehicle is equipped with off-highway capable 4WD and meets at least 4 of 5 criteria outlined in 49 CFR 523.5(b)(2); Enter "**7**" if vehicle is rated at more than 6000 lbs GVWR and meets at least 4 of 5 criteria outlined in 49 CFR 523.5(b)(2);			1	1 per footprint index per footprint submission	A(1)	Enumeration							0 = Passenger Car 1 = Transport more than 10 persons 2 = Temporary living quarters 3 = Transport property on open bed 4 = Greater cargo-carrying than passenger-carrying volume 5 = Expanded use of cargo carrying purposes 6 = Off-highway capable 4WD and at least 4 criteria met 7 = GVW > 6000 lbs. and at least 4 criteria met	Light Duty
FT-43	**Approach Angle Value**	Enter the Approach Angle in degrees (rounded to the nearest degree); ref 49 CFR 523.5(b)(2)(i).			0	1 per footprint index per footprint submission	N(2)	Integer						1	90		Light Duty
FT-44	**Breakover Angle Value**	Enter the Breakover Angle in degrees (rounded to the nearest degree); ref 49 CFR 523.5(b)(2)(ii).			0	1 per footprint index per footprint submission	N(2)	Integer						1	90		Light Duty

FT-45	**Departure Angle Value**	Enter the Departure Angle in degrees (rounded to the nearest degree); ref 49 CFR 523.5(b)(2)(iii).			0	1 per footprint index per footprint submission	N(2)	Integer						1	90		Light Duty
FT-46	**Minimum Running Clearance Value**	Enter the Minimum Running Clearance (ground clearance) in centimeters, (rounded to the nearest centimeter); ref 49 CFR 523.5(b)(2)(iv). Do not include the running clearance of flexible plastic tire aero deflectors (located in front of the front and/or rear tires which reduce aerodynamic drag and thereby improve fuel economy).			0	1 per footprint index per footprint submission	N(2)	Integer						1	30		Light Duty
FT-47	**Minimum Front and Rear Axle Clearance Value**	Enter the smallest of the Front and Rear Axle Ground Clearance measurement in centimeters (rounded to the nearest centimeter); ref 49 CFR 523.5(b)(2)(v).			0	1 per footprint index per footprint submission	N(2)	Integer						1	30		Light Duty
FT-48	**3 Rows of Designated Seating Positions Indicator**	Specify whether the vehicle covered by this footprint has **at least** three rows of designated seating positions, ref. 49 CFR 523.5(a)(5)(ii).			0	1 per footprint index per footprint submission	A(1)	Enumeration								N = No Y =Yes	Light Duty

Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
Footprint		Manufacturer	Front End	XML	TBD
Certification Test Data		Verify	Front end	XML	LD-FE-FT-BR003 LD-FE-FT-BR004 LD-FE-FT-BR012 LD-FE-FT-BR017
Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer	Front End	XML	LD-FE-FT-BR002 LD-FE-FT-BR003 LD-FE-FT-BR004 LD-FE-FT-BR005 LD-FE-FT-BR006 LD-FE-FT-BR007 LD-FE-FT-BR008 LD-FE-FT-BR009 LD-FE-FT-BR011 LD-FE-FT-BR012 LD-FE-FT-BR013 LD-FE-FT-BR014
Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer	Front End	XML	LD-FE-FT-BR002 LD-FE-FT-BR005 LD-FE-FT-BR006 LD-FE-FT-BR007 LD-FE-FT-BR009 LD-FE-FT-BR011 LD-FE-FT-BR013 LD-FE-FT-BR014
Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer	Front End	XML	LD-FE-FT-BR002 LD-FE-FT-BR005 LD-FE-FT-BR006 LD-FE-FT-BR007 LD-FE-FT-BR009 LD-FE-FT-BR011 LD-FE-FT-BR013 LD-FE-FT-BR014
Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer	Front End	XML	LD-FE-FT-BR002 LD-FE-FT-BR005 LD-FE-FT-BR006 LD-FE-FT-BR007 LD-FE-FT-BR009 LD-FE-FT-BR011 LD-FE-FT-BR013 LD-FE-FT-BR014
Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset) For web screens, Verify should automatically increment the index when mfr chooses to add another footprint. For batch, does the mfr need to enter?	Verify	Front End	XML	LD-FE-FT-BR010 LD-FE-FT-BR011 LD-FE-FT-BR016

Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer/ Verify	Front End/Back End	XML/Pre-existing	LD-FE-FT-BR001 LD-FE-FT-BR002
Footprint	If the carline class code of the associated carline equals '30' (Small 2WD SUV), this field is required. Otherwise, Verify will override any user input and determine the value based on the carline class code.	Manufacturer/ Verify	Front End	XML/ Assigned	LD-FE-FT-BR018
Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer/ Verify	Front End/Back End	XML/Pre-existing	LD-FE-FT-BR001 LD-FE-FT-BR002
Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer/ Verify	Front End/Back End	XML/Pre-existing	LD-FE-FT-BR001 LD-FE-FT-BR002
Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer/ Verify	Front End/Back End	XML/Pre-existing	LD-FE-FT-BR001 LD-FE-FT-BR002
Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer/ Verify	Front End/Back End	XML/Pre-existing	
Footprint	Verify should calculate the footprint and display it on the front end using the following equation: Footprint = (((Front Track Width (GL-106.7) + Rear Track Width (GL-106.8)) / 2) * Wheelbase (GL-106.6)) / 144 rounded to one tenth of a square foot using ASTM rounding procedures. The result should then be stored on the back end. Any changes to GL-106.7, GL-106.8, or GL-106.6 should trigger a recalculation of this value.	Verify	Back End	Assigned	
Footprint		Verify	Back End	Assigned	
Footprint		Mfr	Front End	XML	
Footprint	See separate FE calculation tab for the equation as well as the table of required coefficients (Section 533.3, Table V -- Parameters for the Reformed CAFE FE Targets) by model year. This table should be modifiable by EPA.	Verify	Back End	Assigned	

Footprint	This value is the difference between the EPA footprint target FE value (FT-14) and the mfr footprint target FE value (FT-13).	Verify	Back End	Assigned	
Footprint		Mfr	Front End	XML	LD-FE-FT-BR015
Footprint	See separate GHG calculation tab.	Verify	Back End	Assigned	
Footprint	This value is the difference between the EPA footprint target GHG value (FT-17) and the mfr footprint target GHG value (FT-16).	Verify	Back End	Assigned	
	Will be entered manually once per model year with updated coefficients per regulation using back-end database	EPA	Back End	Assigned	
		EPA	Back End	Assigned	
		EPA	Back End	Assigned	
		EPA	Back End	Assigned	
		EPA	Back End	Assigned	
		EPA	Back End	Assigned	
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		EPA	Back End	Assigned	
		EPA	Back End	Assigned	
Footprint		Mfr	Front End	XML	
Footprint		Mfr	Front End	XML	

Footprint		Mfr	Front End	XML	New BR:
					
					Cannot enter Code "6" or "7" unless at least 4 of the following 5 conditions are true:
					
					a) Approach Angle Value (FT-43) >= 28 degrees;
					
					b) Breakover Angle Value (FT-44) >= than 14 degrees;
					
					c) Departure AngleValue (FT-45) >= 20 degrees;
					
					d) Minimum Running Clearance Value (FT-46) >= 20 centimeters;
					
					e) Minimum Front and Rear Axle Clearance Value (FT-47) >= 18 centimeters.

Footprint		Mfr	Front End	XML	New BR: If NHTSA CAFE Vehicle Classification (FT-42) equals '6' or '7' then Approach Angle Value (FT-43) is a required.
Footprint		Mfr	Front End	XML	New BR: If NHTSA CAFE Vehicle Classification (FT-42) equals '6' or '7' then Breakover Angle Value (FT-44) is a required.

Footprint		Mfr	Front End	XML	New BR: If NHTSA CAFE Vehicle Classification (FT-42) equals '6' or '7' then Departure Angle Value (FT-45) is a required.
Footprint		Mfr	Front End	XML	New BR: If NHTSA CAFE Vehicle Classification (FT-42) equals '6' or '7' then Minimum Running Clearance Value (FT-46) is a required.
Footprint		Mfr	Front End	XML	New BR: If NHTSA CAFE Vehicle Classification (FT-42) equals '6' or '7' then Front Axle Clearance Value (FT-47) is a required.
Footprint		Mfr	Front End	XML	New BRs: If NHTSA CAFE Vehicle Classification (FT-42) equals '5' then 3 Rows of Designated Seating Positions Indicator (FT-48) is a required. If NHTSA CAFE Vehicle Classification (FT-42) equals '6' or '7' then 3 Rows of Designated Seating Positions Indicator (FT-48) cannot be equal to 'N' (No).

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category													
CA-3	Process Code	Enter the desired Process Code for the current submission.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails	InformationProcessCode	1	1.. per CAFE/GHG	A(1)	Enumeration			[A-Z0-9]{3}		
CA-0	Manufacturer Code	The three character code assigned by EPA to each manufacturer. This will be derived from users' CDX account.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails	EPAManufacturerCode	1	1.. per CAFE/GHG	A(3)	String	3	3			
CA-1	Model Year	Enter the applicable Model Year for this CAFE submission.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails	ModelYear	1	1.. per CAFE/GHG	N(4)	Year	4	4			
CA-4	CAFE/GHG Compliance Category	Enter the applicable CAFE/GHG Compliance Category for this CAFE/GHG submission.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails	ComplianceCategoryIdentifier	1	1.. per CAFE/GHG	A(3)	Enumeration					
CA-127	GHG Exempt Indicator	For the CAFE/GHG submitter, is your company exempt under 40 CFR 86.1801-12(j) or are the production units between 0 and 4999 over a period of time defined in 40 CFR 86.1801-12(k)?	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails	GreenhouseGasExemptionIndicator	0	1.. per CAFE/GHG	A(1)	Enumeration					
CA-128	GHG Calculation Method	Enter GHG calculation method, i.e. carbon-related exhaust emissions (CREE) or optional carbon-related exhaust emissions (OPT-CREE). Opt-CREE includes N2) and CH4 in the equation, ref 40 CFR 600.113-12(h) thru (l).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails	GreenhouseGasCalculationMethodIdentifier	0	1.. per CAFE/GHG	A(5)	Enumeration					
CA-129	OPT-CREE N2O Default Indicator	Yes or no radio button. Business rule: Yes can only be used for 2012-2014 model years.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails	N2ODefaultValueUsageIndicator	0	1.. per CAFE/GHG	A(1)	Enumeration					

ID	Name	Description	Path	Element		Occurrence	Type	Data Type				
CA-4.5	CAFE/GHG Final Status Indicator	Is this CAFE/GHG submission complete and ready for EPA review? EPA will not review any CAFE/GHG submissions until this indicator is set to "Yes". If necessary, it will still be possible to submit a correction to the CAFE/GHG submission after this indicator has been set to "Yes".	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails	FinalStatusIndicator	0	1.. per CAFE/GHG	A(1)	Enumeration				
CA-227	Official Manufacturer Contact	The official manufacturer contact for the CAFE dataset.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ FuelEconomyCAFEFinalStatusNotificationDetails	ManufacturerCAFEContactIDNumber	1	1 per CAFE/GHG	A(1)	Enumeration				
CAFE & GHG Information: EPA Official Calculated Sales Information												
CA-130	EPA Calculated Official Model Year GHG Production Units	The Verify-calculated final model year GHG production units for this CAFE/GHG Compliance Category (CA-4).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedResultsDetails/ EPAOfficialModelYearProductionVolumeDetails	OfficialModelYearGHGProductionCount	0	1 per CAFE/GHG compliance category	N(7)	Integer			7	0
CA-131	EPA Calculated Official Model Year GHG TLAAS Production Units	The Verify-calculated final model year GHG TLAAS production units for this CAFE/GHG Compliance Category (CA-4).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedResultsDetails/ EPAOfficialModelYearProductionVolumeDetails	OfficialModelYearGHGTLAASProductionCount	0	1 per CAFE/GHG compliance category	N(7)	Integer			7	0
CA-53	EPA Calculated Official Model Year Truck CAFE Production Units	The Verify-calculated final model year truck CAFE production units. Required for all truck submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedResultsDetails/ EPAOfficialModelYearProductionVolumeDetails	OfficialModelYearCAFETruckProductionCount	0	1 per CAFE/GHG compliance category	N(7)	Integer			7	0
CA-54	EPA Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units	The Verify-calculated final model year domestic passenger vehicle CAFE production units. Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedResultsDetails/ EPAOfficialModelYearProductionVolumeDetails	OfficialModelYearCAFEDomesticPassengerVehicleProductionCount	0	1 per CAFE/GHG compliance category	N(7)	Integer			7	0
CA-55	EPA Calculated Official Model Year Import Passenger Vehicle CAFE Production Units	The Verify-calculated final model year import passenger vehicle CAFE production units. Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedResultsDetails/ EPAOfficialModelYearProductionVolumeDetails	OfficialModelYearCAFEImportedPassengerVehicleProductionCount	0	1 per CAFE/GHG compliance category	N(7)	Integer			7	0
CAFE & GHG Information: Manufacturer Official Calculated Sales Information												
CA-132	Manufacturer Calculated Official Model Year GHG Production Units	Enter the manufacturer-calculated final model year GHG production units for this CAFE/GHG Compliance Category (CA-4).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerGreenhouseGasResultsDetails	OfficialModelYearProductionCount	0	1 per CAFE/GHG compliance category	N(7)	Integer			7	0
CA-133	Manufacturer Calculated Official Model Year GHG TLAAS Production Units	Enter the manufacturer-calculated final model year GHG TLAAS production units for this CAFE/GHG Compliance Category (CA-4).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTemporaryLeadtimeAllowanceAlternativeStandardResultsDetails	OfficialModelYearProductionCount	0	1 per CAFE/GHG compliance category	N(7)	Integer			7	0
CA-50	Manufacturer Calculated Official Model Year Truck CAFE Production Units	Enter the manufacturer-calculated final model year truck CAFE production units. Required for all truck submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTruckResultDetails	OfficialModelYearProductionCount	0	1 per CAFE/GHG compliance category	N(7)	Integer			7	0
CA-51	Manufacturer Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units	Enter the manufacturer-calculated final model year domestic passenger vehicle CAFE production units. Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerDomesticPassengerVehicleDetails	OfficialModelYearProductionCount	0	1 per CAFE/GHG compliance category	N(7)	Integer			7	0
CA-52	Manufacturer Calculated Official Model Year Import Passenger Vehicle CAFE Production Units	Enter the manufacturer-calculated final model year import passenger vehicle CAFE production units. Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerImportedPassengerVehicleDetails	OfficialModelYearProductionCount	0	1 per CAFE/GHG compliance category	N(7)	Integer			7	0
CAFE & GHG Information: EPA Baseline Calculation Results (Does NOT include dual-fuel, alternative fuel incentive credits) Note: All CAFE and GHG calculations use ASTM-E29 rounding.												

CA-207	EPA Calculated Baseline Domestic Passenger Vehicle CAFE SFITW3000	The Verify-calculated baseline domestic passenger vehicle CAFE base level sales fraction at ITW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(5,4)	Decimal				5	
CA-208	EPA Calculated Baseline Domestic Passenger Vehicle CAFE FEITW3000	The Verify-calculated baseline domestic passenger vehicle CAFE base level fuel economy at ITW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CA-209	EPA Calculated Baseline Domestic Passenger Vehicle CAFE SFETW4000	The Verify-calculated baseline domestic passenger vehicle CAFE subconfiguration level sales fraction at ETW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(5,4)	Decimal				5	4
CA-210	EPA Calculated Baseline Domestic Passenger Vehicle CAFE FEITW4000	The Verify-calculated baseline domestic passenger vehicle CAFE base level fuel economy at ITW equals 4000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CA-211	EPA Calculated Baseline Import Passenger Vehicle CAFE SFITW3000	The Verify-calculated baseline import passenger vehicle CAFE base level sales fraction at ITW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(5,4)	Decimal				5	4
CA-212	EPA Calculated Baseline Import Passenger Vehicle CAFE FEITW3000	The Verify-calculated baseline import passenger vehicle CAFE base level fuel economy at ITW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CA-213	EPA Calculated Baseline Import Passenger Vehicle CAFE SFETW4000	The Verify-calculated baseline import passenger vehicle CAFE subconfiguration level sales fraction at ETW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(5,4)	Decimal				5	4
CA-214	EPA Calculated Baseline Import Passenger Vehicle CAFE FEITW4000	The Verify-calculated baseline import passenger vehicle CAFE base level fuel economy at ITW equals 4000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CAFE & GHG Information: Mfr Baseline Calculation Results (Does NOT include dual-fuel, alternative fuel incentive credits)		**Note: All CAFE and GHG calculations use ASTM-E29 rounding.**											

CA-138	**Manufacturer Calculated Baseline Average GHG Unrounded 4 Decimal**	The manufacturer-calculated baseline average GHG gram per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerGreenhouseGasResultsD etails/BaselineAverageDetails	Unrounded4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal					8	4
CA-139	**Manufacturer Calculated Baseline Average GHG TLAAS Unrounded 4 Decimal**	The manufacturer-calculated baseline average GHG TLAAS gram per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTemporaryLeadtimeAllow anceAlternativeStandardResultsDetails/ BaselineAverageDetails	Unrounded4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal					8	4
CA-56	**Manufacturer Calculated Baseline Truck CAFE Unrounded 4 Decimal**	The manufacturer-calculated baseline truck CAFE miles per gallon value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles. Required for all truck submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTruckResultDetails/ BaselineTruckDetails	Unrounded4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal					8	4
CA-57	**Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal**	The manufacturer-calculated baseline domestic passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles. The CAFE value is NOT adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerDomesticPassengerVehicl eDetails/BaselineVehicleDetails	UnroundedUnadjusted4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal					8	4
CA-58	**Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal**	The manufacturer-calculated baseline import passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles. The CAFE value is NOT adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerImportedPassengerVehicl eDetails/BaselineVehicleDetails/ UnroundedUnadjusted4Value	UnroundedUnadjusted4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal					8	4
CA-140	**Manufacturer Calculated Baseline Average GHG Rounded Whole Number**	The manufacturer-calculated baseline average GHG gram per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerGreenhouseGasResultsD etails/BaselineAverageDetails	RoundedIntegerValue	0	1 per CAFE/GHG compliance category	N(4,0)	Integer					4	0
CA-141	**Manufacturer Calculated Baseline Average GHG TLAAS Rounded Whole Number**	The manufacturer-calculated baseline average GHG TLAAS gram per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTemporaryLeadtimeAllow anceAlternativeStandardResultsDetails/ BaselineAverageDetails	RoundedIntegerValue	0	1 per CAFE/GHG compliance category	N(4,0)	Integer					4	0
CA-62	**Manufacturer Calculated Baseline Truck CAFE Rounded 1 Decimal**	The manufacturer-calculated baseline truck CAFE miles per gallon value that has been rounded to 1 decimal place for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles. Required for all truck submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTruckResultDetails/ BaselineTruckDetails	Rounded1Value	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal					5	1
CA-64	**Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal**	The manufacturer-calculated baseline test procedure adjusted domestic passenger vehicle CAFE value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerDomesticPassengerVehicl eDetails/BaselineVehicleDetails	UnroundedAdjusted4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal					8	4

CA-65	Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	The manufacturer-calculated baseline test procedure adjusted import passenger vehicle CAFE value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerImportedPassengerVehicleDetails/BaselineVehicleDetails	Verify Light-Duty Data Requirements UnroundedAdjusted4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	
CA-68	Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	The manufacturer-calculated baseline test procedure adjusted domestic passenger vehicle CAFE value that has been rounded to 1 decimal place for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerDomesticPassengerVehicleDetails/BaselineVehicleDetails	RoundedAdjusted1Value	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1
CA-69	Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	The manufacturer-calculated baseline test procedure adjusted import passenger vehicle CAFE value that has been rounded to 1 decimal place for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerImportedPassengerVehicleDetails/BaselineVehicleDetails	RoundedAdjusted1Value	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1
CAFE & GHG Information: EPA Final Calculation Results (includes dual-fuel, alternative fuel incentive credits)			Note: All CAFE and GHG calculations use ASTM-E29 rounding.										
CA-215	EPA Calculated Final Domestic Passenger Vehicle CAFE SFITW3000	The Verify-calculated final domestic passenger vehicle CAFE base level sales fraction at ITW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(5,4)	Decimal				5	4
CA-216	EPA Calculated Final Domestic Passenger Vehicle CAFE FEITW3000	The Verify-calculated final domestic passenger vehicle CAFE base level fuel economy at ITW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CA-217	EPA Calculated Final Domestic Passenger Vehicle CAFE SFETW4000	The Verify-calculated final domestic passenger vehicle CAFE subconfiguration level sales fraction at ETW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(5,4)	Decimal				5	4
CA-218	EPA Calculated Final Domestic Passenger Vehicle CAFE FEITW4000	The Verify-calculated final domestic passenger vehicle CAFE base level fuel economy at ITW equals 4000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CA-219	EPA Calculated Final Import Passenger Vehicle CAFE SFITW3000	The Verify-calculated final import passenger vehicle CAFE base level sales fraction at ITW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(5,4)	Decimal				5	4

ID	Name	Description	Mapping 1	Mapping 2			Format	Type				Len	Dec
CA-220	EPA Calculated Final Import Passenger Vehicle CAFE FEITW3000	The Verify-calculated final import passenger vehicle CAFE base level fuel economy at ITW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	
CA-221	EPA Calculated Final Import Passenger Vehicle CAFE SFETW4000	The Verify-calculated final import passenger vehicle CAFE subconfiguration level sales fraction at ETW equals 3000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(5,4)	Decimal				5	4
CA-222	EPA Calculated Final Import Passenger Vehicle CAFE FEITW4000	The Verify-calculated final import passenger vehicle CAFE base level fuel economy at ITW equals 4000 pounds value that has been rounded to 4 decimal places. This is an intermediate calculation value used in the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	NA	NA	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CAFE & GHG Information: Mfr Final Calculation Results (includes dual-fuel, alternative fuel incentive credits)			**Note: All CAFE and GHG calculations use ASTM-E29 rounding.**										
CA-146	Manufacturer Calculated Final Average GHG Unrounded 4 Decimal	The manufacturer-calculated final average GHG grams per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(i)).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerGreenhouseGasResultsDetails/FinalAverageDetails	Unrounded4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CA-147	Manufacturer Calculated Final Average GHG TLAAS Unrounded 4 Decimal	The manufacturer-calculated final average GHG TLAAS grams per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(i)).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTemporaryLeadtimeAllowanceAlternativeStandardResultsDetails/ FinalAverageDetails	Unrounded4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CA-72	Manufacturer Calculated Final Truck CAFE Unrounded 4 Decimal	The manufacturer-calculated final truck CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). Required for all truck submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTruckResultDetails/ FinalTruckDetails	Unrounded4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CA-73	Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	The manufacturer-calculated final domestic passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). The CAFE value is NOT adjusted for the test procedure adjustment specified in 40 CFR 600.510-08(e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerDomesticPassengerVehicleDetails/FinalVehicleDetails	UnroundedUnadjusted4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CA-74	Manufacturer Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	The manufacturer-calculated final import passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). The CAFE value is NOT adjusted for the test procedure adjustment specified in 40 CFR 600.510-08(e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerImportedPassengerVehicleDetails/FinalVehicleDetails	UnroundedUnadjusted4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4

ID	Field Name	Description	XML Path	Element Name		Frequency	Format	Data Type				Length	Decimals
CA-148	**Manufacturer Calculated Final Average GHG Rounded Whole Number**	The manufacturer-calculated final average GHG grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(i)).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerGreenhouseGasResultsD etails/FinalAverageDetails	RoundedIntegerValue	0	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	
CA-149	**Manufacturer Calculated Final Average GHG TLAAS Rounded Whole Number**	The manufacturer-calculated final average GHG TLAAS grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(i)).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTemporaryLeadtimeAllow anceAlternativeStandardResultsDetails/ FinalAverageDetails	RoundedIntegerValue	0	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0
CA-150	**Manufacturer Calculated Final Truck CAFE Rounded 1 Decimal**	The manufacturer-calculated final truck CAFE miles per gallon value that has been rounded to 1 decimal place. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). Required for all truck submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTruckResultDetails/ FinalTruckDetails	Rounded1Value	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1
CA-80	**Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal**	The manufacturer-calculated final domestic passenger vehicle test procedure adjusted CAFE value that has been rounded to 4 decimal places. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerDomesticPassengerVehicl eDetails/FinalVehicleDetails	UnroundedAdjusted4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CA-81	**Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal**	The manufacturer-calculated final import passenger vehicle test procedure adjusted CAFE value that has been rounded to 4 decimal places. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerImportedPassengerVehicl eDetails/FinalVehicleDetails	UnroundedAdjusted4Value	0	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4
CA-84	**Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal**	The manufacturer-calculated final domestic passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerDomesticPassengerVehicl eDetails/FinalVehicleDetails	RoundedAdjusted1Value	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1
CA-85	**Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal**	The manufacturer-calculated final import passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerImportedPassengerVehicl eDetails/FinalVehicleDetails	RoundedAdjusted1Value	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1

CAFE & GHG Information: EPA's Official Calculation Results (includes "capped" alternative-fuel, dual-fuel credits)   Note: All CAFE and GHG calculations use ASTM-E29 rounding.

ID	Field Name	Description	XML Path	Element Name		Frequency	Format	Data Type				Length	Decimals
CA-151	**EPA Official Average GHG Grams Per Mile**	The official Verify-calculated final average GHG grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The average GHG value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(i)).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedResultsDetails/ EPAOfficialCalculationResultsDetails	OfficialGHGAverageGramsPerMileN umber	0	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0

CA-152	**EPA Official Average GHG TLAAS Grams Per Mile**	The official Verify-calculated final average GHG TLAAS grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The average GHG value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(i)).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedResultsDetails/ EPAOfficialCalculationResultsDetails	OfficialGHGTLAASAverageGramsPerMileNumber	0	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	
CA-91	**EPA Official Truck CAFE Miles Per Gallon**	The official Verify-calculated final truck CAFE miles per gallon value that has been rounded to 1 decimal place. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The CAFE value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). Required for all truck submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedResultsDetails/ EPAOfficialCalculationResultsDetails	OfficialCAFETruckMilesPerGallonValue	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1
CA-92	**EPA Official Domestic Passenger Vehicle CAFE Miles Per Gallon**	The official Verify-calculated final domestic passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedResultsDetails/ EPAOfficialCalculationResultsDetails	OfficialCAFEDomesticPassengerVehicleMilesPerGallonValue	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1
CA-93	**EPA Official Import Passenger Vehicle CAFE Miles Per Gallon**	The official Verify-calculated final import passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedResultsDetails/ EPAOfficialCalculationResultsDetails	OfficialCAFEImportedPassengerVehicleMilesPerGallonValue	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1
CAFE & GHG Information: Mfr's Official Calculation Results (includes "capped" alternative-fuel, dual-fuel credits) Note: All CAFE and GHG calculations use ASTM-E29 rounding.													
CA-153	**Manufacturer Calculated Official Average GHG Grams Per Mile**	The official manufacturer-calculated final average GHG grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The average GHG value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(i)).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerGreenhouseGasResultsDetails	OfficialAverageGramsPerMileNumber	0	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0
CA-154	**Manufacturer Calculated Official Average GHG TLAAS Grams Per Mile**	The official manufacturer-calculated final average GHG TLAAS grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The average GHG value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(i)).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTemporaryLeadtimeAllowanceAlternativeStandardResultsDetails	OfficialAverageGramsPerMileNumber	0	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0
CA-88	**Manufacturer Calculated Official Truck CAFE Miles Per Gallon**	The official manufacturer-calculated final truck CAFE miles per gallon value that has been rounded to 1 decimal place. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The CAFE value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). Required for all truck submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerTruckResultDetails	OfficialMPGValue	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1
CA-89	**Manufacturer Calculated Official Domestic Passenger Vehicle CAFE Miles Per Gallon**	The official manufacturer-calculated final domestic passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerDomesticPassengerVehicleDetails	OfficialMPGValue	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1

ID	Name	Description	XML Path	XML Element		Occurrence	Format	Type				Value	
CA-90	Manufacturer Calculated Official Import Passenger Vehicle CAFE Miles Per Gallon	The official manufacturer-calculated final import passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ManufacturerImportedPassengerVehicleDetails	OfficialMPGValue	0	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	
	Applicable CAFE Standard for Each CAFE Compliance Category										**(Including parameters needed to generate Light-Duty Truck reformed CAFE standards for an indivi**		
CA-10	CAFE Standard Type Indicator	Enter the applicable CAFE standard type for this CAFE Compliance Category.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails	StandardTypeIndicator	0	1.. per CAFE	A(1)	Enumeration					
	Reformed CAFE Standard Calculation										**CA-14 through CA-23 required if CAFE Type Indicator (CA-10) = 'R', els**		
CA-11.5	Carline Manufacturer Code	The carline manufacturer code derived from the FE Label information referenced by the combination of Model Year (CA-1), Mfr Code (CA-0), and Model Type Index (CA-14).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails/ FootprintInformationDetails	EPAManufacturerCode	0	1..n (1 for each Model Type for this CAFE.)	A(3)	String	3	3			
CA-12	Division Code	The division code derived from the FE Label information referenced by the combination of Model Year (CA-1), Mfr Code (CA-0), and Model Type Index (CA-14).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails/ FootprintInformationDetails	ManufacturerDivisionCode	0	1..n (1 for each Model Type for this CAFE.)	N(2)	Integer					
CA-13	Carline Code	The carline code derived from the FE Label information referenced by the combination of Model Year (CA-1), Mfr Code (CA-0), and Model Type Index (CA-14).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails/ FootprintInformationDetails	CarlineCode	0	1..n (1 for each Model Type for this CAFE.)	N(3)	Integer					
CA-14.1	Test Group	The test group derived from the FE Label information referenced by the combination of Model Year (CA-1), Mfr Code (CA-0), and Model Type Index (CA-14).	NA	NA	0	1..n (1 for each Model Type for this CAFE.)	A(12)	Fixed String	12	12			
CA-14.2	Transmission Class Index	The transmission class index derived from the FE Label information referenced by the combination of Model Year (CA-1), Mfr Code (CA-0), and Model Type Index (CA-14).	NA	NA	0	1..n (1 for each Model Type for this CAFE.)	N(3)	Integer					
CA-155	CAFE Domestic/Import Indicator	Enter the applicable domestic or import indicator for this Model Type Index. This is required for passenger vehicle CAFE calculations.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails	DomesticImportIndicator	0	1..n (1 for each Model Type for this CAFE.)	A(1)	Enumeration					
CA-156	GHG TLAAS Indicator	Is this Model Type Index to be included in GHG TLAAS calculations?	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails	TemporaryLeadtimeAllowanceAlternativeStandardIndicator	0	1..n (1 for each Model Type for this CAFE/GHG.)	A(1)	Enumeration					
CA-157	GHG Advanced Technology Indicator	Is this Model Type Index a fuel cell vehicle, EV or PHEV ?	NA	NA	0	1..n (1 for each Model Type for this CAFE/GHG.)	A(1)	Enumeration					

CA-14.5	Footprint Index	Verify-generated Enter the applicable footprint index.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails/ FootprintInformationDetails	FootprintIndexNumber	0	1..n (1 for each footprint per Model Type)	N(2)	Integer				2	
CA-15	Model Type Footprint Description	Enter the manufacturer's model type and footprint description (e.g. "super cab, 4WD, long bed, Dooley"; "super cab, 2WD, short bed", etc.) . Repeat for each footprint within this model type index.	NA	NA	0	1..n (1 for each footprint within each Model Type for this CAFE.)	A(300)	string	1	300			
CA-194	Footprint Final Model Year GHG TLAAS Production Units	Enter the final model year greenhouse gas TLAAS production units of this footprint for this model type.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails/ FootprintInformationDetails	FinalModelYearGreenhouseGasTe mporaryLeadTimeAllowanceAlternat iveStandardProductionNumber	0	1..n (1 for each footprint within each Model Type for this CAFE/GHG.)	N(7)	Integer				7	0
CA-158	Footprint Final Model Year GHG Production Units	Enter the final model year greenhouse gas production units of this footprint for this model type.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails/ FootprintInformationDetails	FinalModelYearGreenhouseGasPro ductionNumber	0	1..n (1 for each footprint within each Model Type for this CAFE/GHG.)	N(7)	Integer				7	0
CA-20	Footprint Final Model Year CAFE Production Units	Enter the final model year fuel economy production units of this footprint for this model type.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails/ FootprintInformationDetails	FinalModelYearProductionNumber	0	1..n (1 for each footprint within each Model Type for this CAFE.)	N(7)	Integer				7	0
CA-16	Wheel base (inches)	Enter the wheel base of this footprint for this model type measured in inches and rounded to one tenth of an inch.	NA	NA	0	1..n (1 for each footprint within each Model Type for this CAFE.)	N(5,1)	Decimal				5	1
CA-17	Front Track Width (inches)	Enter the front track width of this footprint for this model type measured in inches and rounded to one tenth of an inch.	NA	NA	0	1..n (1 for each footprint within each Model Type for this CAFE.)	N(4,1)	Decimal				4	1
CA-18	Rear Track Width (inches)	Enter the rear track width of this footprint for this model type measured in inches and rounded to one tenth of an inch.	NA	NA	0	1..n (1 for each footprint within each Model Type for this CAFE.)	N(4,1)	Decimal				4	1

CA-19	Footprint (square feet)	The Verify-calculated area of this footprint for this model type according to the footprint definition specified in 49 CFR 523.2.	NA	NA	0	1..n (1 for each footprint within each Model Type for this CAFE.)	N(4,1)	Decimal				4	
CA-159	EPA Calculated Footprint Target GHG Value (grams per mile)	Enter the EPA-calculated target greenhouse gas value (in grams per mile) of this footprint for this model type. The EPA-calculated value will be the official value used to calculate the GHG standard for this compliance category.	NA	NA	0	1..n (1 for each footprint within each Model Type for this CAFE/GHG.)	N(5,2)	Decimal				5	2
CA-21.5	EPA Calculated Footprint Target FE Value (miles per gallon)	The EPA-calculated target fuel economy value (in miles per gallon) of this footprint for this model type. This will be the official value used to calculate the CAFE standard for this compliance category.	NA	NA	0	1..n (1 for each footprint within each Model Type for this CAFE.)	N(5,2)	Decimal				5	2
CA-160	Manufacturer Calculated Unrounded GHG Standard	Enter the manufacturer calculated unrounded GHG standard for this compliance category.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails	ManufacturerUnroundedGreenhous eGasStandardValue	0	1.. per CAFE	N(5,1)	Decimal				5	1
CA-161	EPA Calculated Unrounded GHG Standard	The EPA calculated unrounded GHG standard for this compliance category.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationRes ultsDetails/ GHGReformedStandardDetails/ EPAGHGReformedStandardDetails	CalculatedUnroundedReformedGH GStandardValue	0	1.. per CAFE	N(5,1)	Decimal				5	1
CA-162	EPA Calculated Unrounded GHG Standard Discrepancy Value	The EPA-calculated discrepancy between the manufacturer and EPA calculated GHG standards.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationRes ultsDetails/ GHGReformedStandardDetails/ EPAGHGReformedStandardDetails	CalculatedUnroundedReformedGH GDiscrepancyValue	0	1.. per CAFE	N(5,1)	Decimal				5	1
CA-163	EPA Calculated Final GHG Standard	The EPA calculated final GHG standard for this compliance category that has been rounded to a whole number.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationRes ultsDetails/ GHGReformedStandardDetails/ EPAGHGReformedStandardDetails	CalculatedFinalReformedGHGStand ardNumber	0	1.. per CAFE	N(4,0)	Integer				4	0

CA-195	**Manufacturer Calculated Unrounded GHG TLAAS Standard**	Enter the manufacturer calculated unrounded GHG standard for this compliance category.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails	ManufacturerUnroundedGreenhous eGasTemporaryLeadTimeAllowanc eAlternativeStandardValue	0	1.. per CAFE	N(5,1)	Decimal				5	
CA-196	**EPA Calculated Unrounded GHG TLAAS Standard**	The EPA calculated unrounded GHG standard for this compliance category.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationRes ultsDetails/ GHGTLAASReformedStandardDetails/ EPAGHGReformedStandardDetails	CalculatedUnroundedReformedGH GStandardValue	0	1.. per CAFE	N(5,1)	Decimal				5	1
CA-197	**EPA Calculated Unrounded GHG TLAAS Standard Discrepancy Value**	The EPA-calculated discrepancy between the manufacturer and EPA calculated GHG standards.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationRes ultsDetails/ GHGTLAASReformedStandardDetails/ EPAGHGReformedStandardDetails	CalculatedUnroundedReformedGH GDiscrepancyValue	0	1.. per CAFE	N(5,1)	Decimal				5	1
CA-198	**EPA Calculated Final GHG TLAAS Standard**	The EPA calculated final GHG standard for this compliance category that has been rounded to a whole number.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationRes ultsDetails/ GHGTLAASReformedStandardDetails/ EPAGHGReformedStandardDetails	CalculatedFinalReformedGHGStand ardNumber	0	1.. per CAFE	N(4,0)	Integer				4	0
CA-164	**Manufacturer GHG Comments**	Enter any comments for this GHG.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails	ManufacturerGreenhouseGasComm entsText	0	1.. per CAFE	A(1000)	string	1	1000			
CA-22.3	**Manufacturer Calculated Unrounded Reformed Truck CAFE Standard**	Enter the manufacturer calculated unrounded reformed Truck CAFE standard.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails	ManufacturerUnroundedReformedTr uckCAFEStandardValue	0	1.. per CAFE	N(7,4)	Decimal				7	4
CA-22	**EPA Calculated Unrounded Reformed Truck CAFE Standard**	The EPA calculated unrounded reformed Truck CAFE standard for this compliance category.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationRes ultsDetails/ TruckReformedStandardDetails/ EPACAFEReformedStandardDetails	CalculatedUnroundedReformedCAF EStandardValue	0	1.. per CAFE	N(7,4)	Decimal				7	4
CA-22.5	**EPA Calculated Unrounded Reformed Truck CAFE Standard Discrepancy Value**	The EPA-calculated discrepancy between the manufacturer and EPA calculated reformed Truck CAFE standards.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationRes ultsDetails/ TruckReformedStandardDetails/ EPACAFEReformedStandardDetails	CalculatedUnroundedReformedCAF EDiscrepancyValue	0	1.. per CAFE	N(7,4)	Decimal				7	4
CA-22.7	**EPA Calculated Final Reformed Truck CAFE Standard**	The EPA calculated final reformed Truck CAFE standard that has been rounded to one decimal place.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationRes ultsDetails/ TruckReformedStandardDetails/ EPACAFEReformedStandardDetails	CalculatedFinalReformedCAFEStan dardValue	0	1.. per CAFE	N(4,1)	Decimal				4	1
CA-23	**Manufacturer Reformed CAFE Comments**	Enter any comments for this reformed CAFE.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails	ManufacturerReformedCommentsT ext	0	1.. per CAFE	A(1000)	string	1	1000			
CA-199	**Manufacturer Calculated Unrounded Reformed Domestic Passenger Vehicle CAFE Standard**	Enter the manufacturer calculated unrounded reformed domestic passenger vehicle CAFE standard.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ReformedStandardDetails	ManufacturerUnroundedReformedD omesticPassengerVehicleCAFEStan dardValue	0	1.. per CAFE	N(7,4)	Decimal				7	4

ID	Name	Description	Element Path	Element Name		Occurrence	Type	Data Type					
CA-200	EPA Calculated Unrounded Reformed Domestic Passenger Vehicle CAFE Standard	The EPA calculated unrounded reformed domestic passenger vehicle CAFE standard.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationResultsDetails/ DomesticPassengerVehicleReformedStandardDetails/ EPACAFEReformedStandardDetails	CalculatedUnroundedReformedCAFEStandardValue	0	1.. per CAFE	N(7,4)	Decimal				7	
CA-201	EPA Calculated Unrounded Reformed Domestic Passenger Vehicle CAFE Standard Discrepancy Value	The EPA-calculated discrepancy between the manufacturer and EPA calculated reformed domestic passenger vehicle CAFE standards.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationResultsDetails/ DomesticPassengerVehicleReformedStandardDetails/ EPACAFEReformedStandardDetails	CalculatedUnroundedReformedCAFEDiscrepancyValue	0	1.. per CAFE	N(7,4)	Decimal				7	4
CA-202	EPA Calculated Final Reformed Domestic Passenger Vehicle CAFE Standard	The EPA calculated final reformed domestic passenger vehicle CAFE standard that has been rounded to one decimal place.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationResultsDetails/ DomesticPassengerVehicleReformedStandardDetails/ EPACAFEReformedStandardDetails	CalculatedFinalReformedCAFEStandardValue	0	1.. per CAFE	N(4,1)	Decimal				4	1
CA-203	Manufacturer Calculated Unrounded Reformed Import Passenger Vehicle CAFE Standard	Enter the manufacturer calculated unrounded reformed import passenger vehicle CAFE standard.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedFuelEconomyCAFEDetails/EPAReformedStandardDetails	ManufacturerUnroundedReformedImportPassengerVehicleCAFEStandardValue	0	1.. per CAFE	N(7,4)	Decimal				7	4
CA-204	EPA Calculated Unrounded Reformed Import Passenger Vehicle CAFE Standard	The EPA calculated unrounded reformed import passenger vehicle CAFE standard.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationResultsDetails/ ImportedPassengerVehicleReformedStandardDetails/ EPACAFEReformedStandardDetails	CalculatedUnroundedReformedCAFEStandardValue	0	1.. per CAFE	N(7,4)	Decimal				7	4
CA-205	EPA Calculated Unrounded Reformed Import Passenger Vehicle CAFE Standard Discrepancy Value	The EPA-calculated discrepancy between the manufacturer and EPA calculated reformed import passenger vehicle CAFE standards.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationResultsDetails/ ImportedPassengerVehicleReformedStandardDetails/ EPACAFEReformedStandardDetails	CalculatedUnroundedReformedCAFEDiscrepancyValue	0	1.. per CAFE	N(7,4)	Decimal				7	4
CA-206	EPA Calculated Final Reformed Import Passenger Vehicle CAFE Standard	The EPA calculated final reformed import passenger vehicle CAFE standard that has been rounded to one decimal place.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAReformedStandardCalculationResultsDetails/ ImportedPassengerVehicleReformedStandardDetails/ EPACAFEReformedStandardDetails	CalculatedFinalReformedCAFEStandardValue	0	1.. per CAFE	N(4,1)	Decimal				4	1
CA-223	EPA CAFE/GHG Final Indicator	EPA CAFE/GHG Final Indicator	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ EPAGeneratedResultsDetails	EPAFinalStatusIndicator	0	1.. per CAFE	A(1)	Enumeration					
CA-224	EPA CAFE/GHG Calculation Complete Indicator	EPA CAFE/GHG Calculation Complete Indicator	NA	NA	0	1.. per CAFE	A(1)	Enumeration					

CA-225	EPA CAFE/GHG Calculation Failure Reason	EPA CAFE/GHG Calculation Failure Reason	NA	NA	0	1.. per CAFE	A(1000)	Fixed String	string	1	1000		

CAFE Calculation Information (Model Type Information -- a unique combination of CarLine, Basic Engine and Transmission Class (Note- all of the Model Type description info submitted in FE Label will be used for CAFE, even though it is not shown here with the CAFE data requirements))

CA-25.1	Carline Manufacturer Code	Enter the applicable Carline Manufacturer Code for this Model Type Index.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails	EPAManufacturerCode	1	1..n (1 for each Model Type for this CAFE.)	A(3)	Fixed String					
CA-25	Model Type Index	Enter the applicable model type index (previously created in FE Label) for this CAFE compliance category. All model type indices created in FE Label for a manufacturer and model year must be used in one of the CAFE compliance categories for that same manufacturer and model year, except for police/emergency model types.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails	ModelTypeIndexNumber	1	1.. n (1 for each Model Type for this CAFE.)	N(3)	Enumeration					

Verify-Calculated Model Type Level Fields (Intermediate Calculations)

CA-226	EPA CAFE/GHG Model Type Calculation Complete Indicator	EPA CAFE/GHG Model Type Calculation Complete Indicator	NA	NA	0	1 per Model type Index	A(1)	Enumeration					
CA-226.5	EPA CAFE/GHG Model Type Calculation Failure Reason	EPA CAFE/GHG Model Type Calculation Failure Reason	NA	NA	0	1 per Model type Index	A(1000)	Fixed String	string	1	1000		
CA-229	EPA Calculated Model Type AMFA City FE Value 4 decimal	Verify calculated AMFA (Alternative Motor Fuels Act) City FE value	NA	NA	0	1 per Model type Index	N(7,4)	Decimal				7	4
CA-230	EPA Calculated Model Type AMFA Highway FE Value 4 decimal	Verify calculated AMFA (Alternative Motor Fuels Act) Highway FE value	NA	NA	0	1 per Model type Index	N(7,4)	Decimal				7	4
CA-231	EPA Calculated Model Type AMFA Combined FE Value 4 decimal	Verify calculated AMFA (Alternative Motor Fuels Act) Combined FE value	NA	NA	0	1 per Model type Index	N(7,4)	Decimal				7	4
CA-232	EPA Calculated Model Type City GHG Value 1 decimal	Verify calculated City GHG value	NA	NA	0	1 per Model type Index	N(5,1)	Decimal				5	1
CA-233	EPA Calculated Model Type Highway GHG Value 1 decimal	Verify calculated Highway GHG value	NA	NA	0	1 per Model type Index	N(5,1)	Decimal				5	1
CA-234	EPA Calculated Model Type Combined GHG Value 1 decimal	Verify calculated Combined GHG value	NA	NA	0	1 per Model type Index	N(5,1)	Decimal				5	1
CA-235	EPA Calculated Model Type CAFE Production Volume	Verify calculated value	NA	NA	0	1 per Model type Index	N(7)	Integer				7	0
CA-236	EPA Calculated Model Type GHG Production Volume	Verify calculated value	NA	NA	0	1 per Model type Index	N(7)	Integer				7	0
CA-237	EPA Calculated Model Type CAFE Test Volume	Verify calculated value	NA	NA	0	1 per Model type Index	N(7)	Integer				7	0

Additional CAFE Base Level Info not included in Model Type Indexes (CA-25) (Multiple Base Levels may exist within a Model Type)   Base Level is defined as a "unique combination of Basic Engine, Transmission Class and Inertia Weight Class".(ref: 40 CFR 600.002)   (For IT:

CA-25.5	Base Level Index	Assigned by Verify for each base level (i.e. inertia weight class) created by the manufacturer.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails	BaseLevelIndexNumber	1	1.. n (1 for each base level within a Model Type for this CAFE.)	N(2)	Integer					

| CA-25.6 | Inertia Weight Class | Inertia Weight Class (ref: 40 CFR 600.002-08): means the class, which is a group of test weights, into which a vehicle is grouped based on is loaded vehicle weight in accordance with the provisions of 40 CFR 86. | FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails | InertiaWeightClassNumber | 1 | 1.. n (1 for each base level within a Model Type for this CAFE.) | N(5) | Integer | | | | | | |

| **Configuration Info (Multiple Configurations may exist within a Base Level) - unique combination of Engine Code, Axle Ratio and Transmission Configuration within a Base Level** | | | | | | | | | | | | | | |

CA-26	Configuration Index	Enter the new configuration index number assigned by the manufacturer that has not already been entered in FE Label to identify each configuration within a Base Level that contains a unique combination of Engine Code, Axle Ratio and Transmission Configuration. Manufacturers should assign the code as specified below: 001-499: A portion of this configuration is represented by a test vehicle. 501-999: No portion of this configuration is represented by a test vehicle. (Formerly "DVC" (Data vehicle code) in CFEIS.)	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails	ConfigurationIndexNumber	1	1..n (1 for each Configuration within each Base Level within a Model Type)	N(3)	Integer				3	0
CA-27	Transmission Configuration Code	Enter the Transmission Configuration Code assigned by the manufacturer for this Configuration. 1. The Transmission Configuration Code is used to distinguish a unique transmission configuration within a Transmission Class. Manufacturers may assign the code alphanumerically up to two characters (e.g. '1', 'A', '02', 'A2', '3B', etc.). 2. For a definition of Transmission Configuration, see 40 CFR 600.002-08 and A/C 83A. 3. This data element replaces all of the CFEIS "FR" and "FL" data elements and is functionally equivalent to the CFEIS "Transmission Configuration Link" data element.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails	TransmissionConfigurationCode	1	1..n (1 for each Configuration within each Base Level within a Model Type)	A(2)	String	1	2	[A-Z0-9] {1,2}		
CA-28	Engine Code	Enter the Engine Code for this Configuration which is used to distinguish a unique combination of displacement, fuel delivery system, calibration, emission control, … within a Engine system combination (ref: 40 CFR 600.002-08).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails	EngineCodeText	1	1..n (1 for each Configuration within each Base Level within a Model Type)	A(14)	String	1	14			
CA-29	Axle Ratio	Enter the axle ratio for this Configuration.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails	AxleRatioValue	1	1..n (1 for each Configuration within each Base Level within a Model Type)	N(3,2)	Decimal				3	2

| **Subconfiguration Info (Multiple Subconfigurations may exist within a Configuration Level) - unique combination of ETW and RLHP within a configuration Level** | | | | | | | | | | | | | | |

CA-29.5	Subconfiguration Index	Enter the index number assigned by the manufacturer to identify this subconfiguration that has not already been entered in FE Label within a configuration. Subconfiguration Index is used to identify each subconfiguration within a configuration that contains a unique combination of equivalent test weight and road load horse power. Manufacturers should assign this code as specified below: 01-49: for a subconfiguration represented by a test vehicle. 51-99: for a subconfiguration not represented by a test vehicle. (Formerly "RLC" (Road Load Code) in CFEIS.)	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails	SubConfigurationIndexNumber	1	1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer				2	
CA-30	Total Road Load Horsepower	Enter the total road load horsepower at 50 mph (TRLHP50).	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails	RoadLoadHorsepowerValue	1	1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(3,1)	Decimal				3	1
CA-31	Equivalent Test Weight (ETW)	Enter the Equivalent Test Weight (ETW) within a specified Inertia Weight Class.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails	EquivalentTestWeightValue	1	1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(5)	Enumeration					
CA-228	N/V Ratio	Enter the applicable N/V ratio for this test vehicle configuration.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails	NVRatioValue	0	1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(4,1)	Decimal				4	1

Subconfiguration production units information - Within a subconfiguration, manufacturers must report production units for each combination of Carline (MfrCode, DivCode, CarlineCode) and testgroup.

CA-124	Carline Manufacturer Code	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails/ SubConfigurationSalesDetails	EPAManufacturerCode	1	(1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(3)	String	3	3	[A-Z0-9]{3}		
CA-125	Division Code	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails/ SubConfigurationSalesDetails	ManufacturerDivisionCode	1	(1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer	1	2			
CA-126	Carline Code	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails/ SubConfigurationSalesDetails	CarlineCode	1	(1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(3)	Integer	1	3			
CA-34	Test Group	Enter the applicable test group name for this subconfiguration.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails/ SubConfigurationSalesDetails	TestGroupName	1	(1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}([\.][A-Z0-9]{1,6})?		

CA-193	**Manufacturer Subconfiguration Final Model Year GHG Production Units**	Enter the manufacturer-calculated final model year fuel economy production units for this carline and testgroup. This will be used in the GHG calculations.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails/ SubConfigurationSalesDetails	SubConfigurationFinalModelYearGreenhouseGasProductionNumber	0	(1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(6)	Integer					
CA-32	**Manufacturer Subconfiguration Final Model Year FE Production Units**	Enter the manufacturer-calculated final model year fuel economy production units for this carline and testgroup. This will be used in the CAFE calculations.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails/ SubConfigurationSalesDetails	SubConfigurationFinalModelYearProductionNumber	1	(1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(6)	Integer					
Test Vehicle Info (Multiple vehicles with multiple tests may exist within a sub-configuration)													
CA-35	**Test Number**	Enter an applicable Test Number for this CAFE that was previously assigned by Verify in Test Information. Test Number must be entered when Subconfiguration Index (CA-29) is 1 to 49 and Configuration Index (CA-26) is 1 to 499 which indicates that the subconfiguration is represented by a tested vehicle.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails/ TestVehicleDetails	TestNumberIdentifier	0	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(12)	String					
CA-36	**Vehicle ID**	A unique alphanumeric identifier assigned by the manufacturer to each test vehicle	NA	NA	0	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(20)	String	1	20			

CA-37	Vehicle Configuration Number	A number previously assigned to specify a unique test vehicle configuration.	NA	NA	0	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer					
CA-38	Analytically-Derived FE/CREE Indicator	The fuel economy values for this vehicle that represent a sub-configuration were generated by an EPA-approved analytically-derived method, in lieu of testing (ref: 40 CFR 600.006(e) and CCD-04-06). The number of ADFE must be no more than 20% of the subconfigurations tested in CAFE (ref: CD-04-06).	NA	NA	0	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration					
CA-39	Data Substitution Indicator	Enter the applicable Data Substitution Indicator for this test.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails/ TestVehicleDetails	DataSubstitutionIndicator	0	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration					
CA-40	Averaging Method	Enter the Averaging Method to be used if this Test Number is part of an averaging group (i.e. subconfiguration equipped with a multi-mode transmission or Shift Indicator Light), where: N = No averaging S = Simple averaging (Sum(i=1 to n) (FET(i) * WT(i))) H = Harmonic averaging (1/(Sum(i=1 to n) (FET(i) / WT(i)))) Note: WT(i) = Averaging Weighting Factor (GL-135) of the MPG value, specified by the manufacturer based on EPA's Guidance (ref: CCD-01-25R, CD-87-01 and A/C 83A); and, FET(i) = MPG of test.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails/ TestVehicleDetails	AveragingMethodIdentifier	0	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration					
CA-41	Averaging Group Indicator	Enter the Averaging Group Indicator assigned by the manufacturer that will be used to identify all the tests (of the same test procedure) that need to be averaged together.	FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails/ TestVehicleDetails	AveragingGroupIndicator	0	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	String	1	1	[A-Z0-9]		

| CA-42 | **Averaging Weighting Factor** | Enter the averaging weighting factor for this vehicle mpg if equipped with either Shift Indicator Light (SIL) or multi-mode transmission.

(Formerly 'Test Group Weighting' in CFEIS). | FuelEconomyCAFESubmission/ FuelEconomyCAFEDetails/ ModelTypeDetails/BaseLevelDetails/ ConfigurationDetails/ SubConfigurationDetails/ TestVehicleDetails | Verify Light-Duty Data Requirements | AveragingWeightingFactorValue | 0 | 1..n (1 for each Test within each Subconfigur ation within each Configuratio n within each Base Level within each Model Type) | N(3,2) | Decimal | | | | 3 | Office of Transportation and Air Quality |

Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collection Point	Collection Type	Front-End Validation	Back-End Validation	Applicable Business Rules
		N = New dataset C = Correction of an existing Verify dataset	Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR217
			Light Duty	FE CAFE		Derived from user login	Verify	Front End	XML			LD-FE-CA-BR001a LD-FE-CA-BR001b LD-FE-CA-BR001c LD-FE-CA-BR002 LD-FE-CA-BR016 LD-FE-CA-BR017 LD-FE-CA-BR021a LD-FE-CA-BR021b LD-FE-CA-BR021c LD-FE-CA-BR163 LD-FE-CA-BR212 LD-FE-CA-BR213
1957	2100		Light Duty	FE CAFE		Lock the MY CAFE data after the official MY CAFE letter is sent. Data can't be modified w/o unlocked by EPA staff.	Mfr	Front End	XML			LD-FE-CA-BR001a LD-FE-CA-BR001b LD-FE-CA-BR001c LD-FE-CA-BR002 LD-FE-CA-BR008 LD-FE-CA-BR168 LD-FE-CA-BR213 LD-FE-CA-BR214
		LT = Light Trucks PV = Passenger Vehicles	Light Duty	FE CAFE		Based on the model type fuel indicator fields CA-26 to CA-28, Verify will be programmed to calculate the baseline (unadjusted and adjusted 4-decimal place) CAFE mpg values, the final (4-decimal place) CAFE mpg value and the rounded (one-decimal place) Official CAFE values. The Official CAFE value is limited to a maximum CAFE incentive credit of 1.2 mpg for 1993-2010 model years. See notes to data elements CA-26 to CA-28. The CAFE incentive credit for dual and alt-fuels can change from year to year. Create a look-up table for the allowed maximum dual fuel, alternate fueled vehicle CAFE credit vs. applicable model year.	Mfr	Front End	XML			LD-FE-CA-BR001a LD-FE-CA-BR001b LD-FE-CA-BR001c LD-FE-CA-BR002 LD-FE-CA-BR213
		N=No Y=Yes	Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR034
		CREE = CREE OPT-CREE = OPT-CREE	Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR035 LD-FE-CA-BR160 LD-FE-CA-BR161 LD-FE-CA-BR162
		N=No Y=Yes (2012 to 2014 only)	Light Duty	FE CAFE		'Yes' is only allowed for 2012 to 2014 model years	Mfr	Front End	XML			LD-FE-CA-BR033

Verify Light-Duty Data Requirements

		N=No Y=Yes	Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR214
			Light Duty	FE CAFE		The list of manufacture codes assigned to the contacts in the Manufacturer Module assigned to Light Duty Vehicle Truck and the FE CAFE compliance program	Mfr	Front End	XML			LD-FE-CA-BR211 LD-FE-CA-BR218
0	9999999					New Verify calculation	Verify	Back End	Assigned			
0	9999999					New Verify calculation	Verify	Back End	Assigned			
0	9999999					New Verify calculation	Verify	Back End	Assigned			
0	9999999					New Verify calculation	Verify	Back End	Assigned			
0	9999999					New Verify calculation	Verify	Back End	Assigned			
0	9999999						Mfr	Front End	XML			LD-FE-CA-BR039
0	9999999						Mfr	Front End	XML			LD-FE-CA-BR156
0	9999999						Mfr	Front End	XML			LD-FE-CA-BR040
0	9999999						Mfr	Front End	XML			LD-FE-CA-BR041
0	9999999						Mfr	Front End	XML			LD-FE-CA-BR042

0	1.0000					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-66) is done.	Verify	Back End	Assigned		
0	9999.9999					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-66) is done.	Verify	Back End	Assigned		
0	1.0000					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-66) is done.	Verify	Back End	Assigned		
0	9999.9999					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-66) is done.	Verify	Back End	Assigned		
0	1.0000					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-67) is done.	Verify	Back End	Assigned		
0	9999.9999					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-67) is done.	Verify	Back End	Assigned		
0	1.0000					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-67) is done.	Verify	Back End	Assigned		
0	9999.9999					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-67) is done.	Verify	Back End	Assigned		

0	9999.9999						Mfr	Front End	XML		LD-FE-CA-BR055
0	9999.9999						Mfr	Front End	XML		LD-FE-CA-BR056
0	9999.9999						Mfr	Front End	XML		LD-FE-CA-BR057
0	9999.9999						Mfr	Front End	XML		LD-FE-CA-BR058
0	9999.9999						Mfr	Front End	XML		LD-FE-CA-BR059
0	9999						Mfr	Front End	XML		LD-FE-CA-BR060
0	9999						Mfr	Front End	XML		LD-FE-CA-BR061
0	9999.9						Mfr	Front End	XML		LD-FE-CA-BR062
0	9999.9999						Mfr	Front End	XML		LD-FE-CA-BR063

0	9999.9999						Mfr	Front End	XML			LD-FE-CA-BR064
0	9999.9						Mfr	Front End	XML			LD-FE-CA-BR065
0	9999.9						Mfr	Front End	XML			LD-FE-CA-BR066
0	1.0000					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-76) is done.	Verify	Back End	Assigned			
0	9999.9999					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-76) is done.	Verify	Back End	Assigned			
0	1.0000					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-76) is done.	Verify	Back End	Assigned			
0	9999.9999					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-76) is done.	Verify	Back End	Assigned			
0	1.0000					This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-77) is done.	Verify	Back End	Assigned			

0	9999.9999			July 2014			This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-77) is done.	Verify	Back End	Assigned			
0	1.0000						This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-77) is done.	Verify	Back End	Assigned			
0	9999.9999						This value is is an intermediate calculation result, and should be written any time the 'EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal calculation' (CA-77) is done.	Verify	Back End	Assigned			
0	9999.9999							Mfr	Front End	XML			LD-FE-CA-BR079
0	9999.9999							Mfr	Front End	XML			LD-FE-CA-BR080
0	9999.9999							Mfr	Front End	XML			LD-FE-CA-BR081
0	9999.9999							Mfr	Front End	XML			LD-FE-CA-BR082
0	9999.9999							Mfr	Front End	XML			LD-FE-CA-BR083

Verify Light-Duty Data Requirements

0	9999		Air Quality				Mfr	Front End	XML		LD-FE-CA-BR084
0	9999						Mfr	Front End	XML		LD-FE-CA-BR085
0	9999.9						Mfr	Front End	XML		LD-FE-CA-BR086
0	9999.9999						Mfr	Front End	XML		LD-FE-CA-BR087
0	9999.9999						Mfr	Front End	XML		LD-FE-CA-BR088
0	9999.9						Mfr	Front End	XML		LD-FE-CA-BR089
0	9999.9						Mfr	Front End	XML		LD-FE-CA-BR090
0	9999						Verify	Back End	Assigned		

0	9999		Air Quality				Verify	Back End	Assigned			
0	9999.9						Verify	Back End	Assigned			
0	9999.9						Verify	Back End	Assigned			
0	9999.9						Verify	Back End	Assigned			
0	9999						Mfr	Front End	XML			LD-FE-CA-BR096
0	9999						Mfr	Front End	XML			LD-FE-CA-BR097
0	9999.9						Mfr	Front End	XML			LD-FE-CA-BR098
0	9999.9						Mfr	Front End	XML			LD-FE-CA-BR099

							Verify	Mfr	Front End	XML			LD-FE-CA-BR100
0	9999.9												

dual mfr for MY 2010 and later)													
		R = Reformed CAFE U = Unreformed CAFE (existing requirements)	Light Duty	FE CAFE				Mfr	Front End	XML			LD-FE-CA-BR004
se not allowed.													
			Light Duty	FE CAFE		GL-10	Verify	Front End	XML				LD-FE-CA-BR138 LD-FE-CA-BR169 LD-FE-CA-BR208
1	99		Light Duty	FE CAFE		GL-11	Verify	Front End	XML				LD-FE-CA-BR139 LD-FE-CA-BR208
1	999		Light Duty	FE CAFE		GL-12	Verify	Front End	XML				LD-FE-CA-BR140 LD-FE-CA-BR208
			Light Duty	FE CAFE		GL-13.5	Verify	Back End	Pre-existing data				
1	999		Light Duty	FE CAFE		GL-66	Verify	Back End	Pre-existing data				
		D = Domestic I = Import	Light Duty	FE CAFE				Mfr	Front End	XML			LD-FE-CA-BR101
		Y = Yes N = No	Light Duty	FE CAFE				Mfr	Front End	XML			LD-FE-CA-BR102a LD-FE-CA-BR102b
		Y = Yes N = No	Light Duty	FE CAFE		Where is this data coming from. (Calculation?, other dataset?)	Verify	Back End	Pre-existing data				

1	99		Light Duty	FE CAFE		FT-5	Verify	Front End	XML			LD-FE-CA-BR143 LD-FE-CA-BR157
			Light Duty	FE CAFE		FT-6	Verify	Back End	Pre-existing data			
0	9999999		Light Duty	FE CAFE			Mfr	Front End	XML			
0	9999999		Light Duty	FE CAFE		Note to CSC: The production units that apply to fuel economy (CAFE) may be different than the production units that apply to the GHG/CREE calculation. I.E. emergency vehicles, sales in U.S. Territories, etc. The GHG sales will be added in Phase 2.	Mfr	Front End	XML			LD-FE-CA-BR104
0	9999999		Light Duty	FE CAFE		Note to CSC: The production units that apply to fuel economy (CAFE) may be different than the production units that apply to the GHG/CREE calculation. I.E. emergency vehicles, sales in U.S. Territories, etc. The GHG sales will be added in Phase 2.	Mfr	Front End	XML			LD-FE-CA-BR145
0.1	9999.9		Light Duty	FE CAFE			Verify	Back End	Pre-existing data			
0.1	999.9		Light Duty	FE CAFE			Verify	Back End	Pre-existing data			
0.1	999.9		Light Duty	FE CAFE			Verify	Back End	Pre-existing data			

0.1	999.9		Light Duty	FE CAFE		Verify should calculate the footprint and display it on the front end using the following equation: Footprint = (((Front Track Width (CA-17) + Rear Track Width (CA-18)) / 2) * Wheelbase (CA-16)) / 144 rounded to one tenth of a square foot using ASTM rounding procedures. The result should then be stored on the back end. Any changes to CA-17, CA-18 or CA-16 should trigger a recalculation of this value.	Verify	Back End	Pre-existing data			
0.01	999.99		Light Duty	FE CAFE		Verify should compare this value with the EPA-calculated value (CA-21.5) and report any discrepancy in the submission processing report sent to the mfr. The discrepancy status should be stored and displayed on the back end.	Verify	Backend	Pre-existing Data			
0.01	999.99		Light Duty	FE CAFE	FT-14	Verify should compare this value with the mfr-calculated value (CA-21) and report any discrepancy in the submission processing report sent to the mfr. The discrepancy status should be stored and displayed on the back end. See separate FE calculation document for the equation as well as the table of required coefficients (Section 533.3, Table V -- Parameters for the Reformed CAFE FE Targets) by model year. This table should be modifiable by EPA.	Verify	Back End	Pre-existing Data			
0.0	9999.9		Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR154
0.0	9999.9		Light Duty	FE CAFE			Verify	Back End	Assigned			
-9999.9	9999.9		Light Duty	FE CAFE			Verify	Back End	Assigned			
0	9999		Light Duty	FE CAFE			Verify	Back End	Assigned			

0.0	9999.90		Light Duty	FE CAFE			Mfr	Front End	XML		
0.0	9999.9		Light Duty	FE CAFE			Verify	Back End	Assigned		
-9999.9	9999.9		Light Duty	FE CAFE			Verify	Back End	Assigned		
0	9999		Light Duty	FE CAFE			Verify	Back End	Assigned		
			Light Duty	FE CAFE			Mfr	Front End	XML		
0.0000	999.9999		Light Duty	FE CAFE			Mfr	Front End	XML		LD-FE-CA-BR018
0.0000	999.9999		Light Duty	FE CAFE		See separate FE calculation document for the equation.	Verify	Back End	Assigned		
-999.9999	999.9999		Light Duty	FE CAFE		This value is the difference between the EPA Calculated Unrounded Reformed CAFE Standard (CA-22) and the Mfr Calculated Unrounded Reformed CAFE Standard (CA-21). calcReformCAFEdiscrepancyValue (CA-22.5) = (CA-22) - (CA-22.3)	Verify	Back End	Assigned		
0.0	999.9		Light Duty	FE CAFE		See separate FE calculation document for the equation.	Verify	Back End	Assigned		
			Light Duty	FE CAFE			Mfr	Front End	XML		
0.0000	999.9999		Light Duty	FE CAFE			Mfr	Front End	XML		LD-FE-CA-BR205

0.0000	999.9999		Light Duty	FE CAFE		See separate FE calculation document for the equation.	Verify	Back End	Assigned		
-999.9999	999.9999		Light Duty	FE CAFE		This value is the difference between the EPA Calculated Unrounded Reformed CAFE Standard (CA-22) and the Mfr Calculated Unrounded Reformed CAFE Standard (CA-21). calcReformCAFEdiscrepancyValue (CA-22.5) = (CA-22) - (CA-22.3)	Verify	Back End	Assigned		
0.0	999.9		Light Duty	FE CAFE		See separate FE calculation document for the equation.	Verify	Back End	Assigned		
0.0000	999.9999		Light Duty	FE CAFE			Mfr	Front End	XML		LD-FE-CA-BR206
0.0000	999.9999		Light Duty	FE CAFE		See separate FE calculation document for the equation.	Verify	Back End	Assigned		
-999.9999	999.9999		Light Duty	FE CAFE		This value is the difference between the EPA Calculated Unrounded Reformed CAFE Standard (CA-22) and the Mfr Calculated Unrounded Reformed CAFE Standard (CA-21). calcReformCAFEdiscrepancyValue (CA-22.5) = (CA-22) - (CA-22.3)	Verify	Back End	Assigned		
0.0	999.9		Light Duty	FE CAFE		See separate FE calculation document for the equation.	Verify	Back End	Assigned		
		Y = Yes N = No	Light Duty	FE CAFE			Verify	Back End	Assigned		
		Y = Yes N = No	Light Duty	FE CAFE			Verify	Back End	Assigned		

			Light Duty	FE CAFE			Verify	Back End	Assigned		
			Light Duty	FE CAFE			Mfr	Front End	XML		LD-FE-CA-BR008 LD-FE-CA-BR032 LD-FE-CA-BR169 LD-FE-CA-BR208
1	999		Light Duty	FE CAFE		Reference all model type info in FE Label via this model type index (CA-25) + mfr code (CA-0) + model year (CA-1).	Mfr	Front End	XML		LD-FE-CA-BR008 LD-FE-CA-BR032 LD-FE-CA-BR203 LD-FE-CA-BR204 LD-FE-CA-BR208
		Y = Yes N = No	Light Duty	FE CAFE			Verify	Back End	Assigned		
			Light Duty	FE CAFE			Verify	Back End	Assigned		
0	999.9999						Verify	Back End	Assigned		
0	999.9999						Verify	Back End	Assigned		
0	999.9999						Verify	Back End	Assigned		
0	9999.9						Verify	Back End	Assigned		
0	9999.9						Verify	Back End	Assigned		
0	9999.9						Verify	Back End	Assigned		
0	9999999						Verify	Back End	Assigned		
0	9999999						Verify	Back End	Assigned		
0	9999999						Verify	Back End	Assigned		
means a unique combination of BasicEngineIndex, TransmissionClassIndex and Inertia Weight)											
1	99		Light Duty	FE CAFE		Assigned by Verify as a sequential incrementer for each base level (i.e. inertia weight class) entered by the mfr. Data elements GL-110 through GL-116 make this a repeating dataset.	Verify	Front End	XML		

0	99999		Light Duty	FE CAFE		Mfrs must enter this so EPA knows which configuration and subconfiguration for which they are adding new tests for CAFE purposes. GL-110	Verify Light-Duty Data Requirements	Mfr	Front End	XML			LD-FE-CA-BR023 LD-FE-CA-BR187 LD-FE-CA-BR188 LD-FE-CA-BR189 LD-FE-CA-BR190 LD-FE-CA-BR191 LD-FE-CA-BR192 LD-FE-CA-BR193 LD-FE-CA-BR194 LD-FE-CA-BR195 LD-FE-CA-BR196 LD-FE-CA-BR197 LD-FE-CA-BR198 LD-FE-CA-BR199 LD-FE-CA-BR200
1	999		Light Duty	FE CAFE				Mfr	Front End	XML			LD-FE-CA-BR024 LD-FE-CA-BR171
			Light Duty	FE CAFE				Mfr	Front End	XML			LD-FE-CA-BR026
			Light Duty	FE CAFE				Mfr	Front End	XML			LD-FE-CA-BR026
0.01	9.99		Light Duty	FE CAFE				Mfr	Front End	XML			LD-FE-CA-BR026

1	99		Light Duty	FE CAFE			Mfr	Front End	XML		LD-FE-CA-BR025 LD-FE-CA-BR172 LD-FE-CA-BR173
0	99.9		Light Duty	FE CAFE			Mfr	Front End	XML		LD-FE-CA-BR027
		1000, 1125, 1250, 1375, 1500, 1625, 1750, 1875, 2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875, 3000, 3125, 3250, 3375, 3500, 3625, 3750, 3875, 4000, 4250, 4500, 4750, 5000, 5250, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500,10000, 10500, 11000, 11500, 12000, 12500, 13000, 13500, 14000	Light Duty	FE CAFE			Mfr	Front End	XML		LD-FE-CA-BR027 LD-FE-CA-BR200
0	999.9		Light Duty	FE CAFE			Mfr	Front End	XML		LD-FE-CA-BR210

							Mfr	Front End	XML			LD-FE-CA-BR168 LD-FE-CA-BR169 LD-FE-CA-BR202 LD-FE-CA-BR207
1	99						Mfr	Front End	XML			LD-FE-CA-BR168 LD-FE-CA-BR169 LD-FE-CA-BR202
1	999						Mfr	Front End	XML			LD-FE-CA-BR168 LD-FE-CA-BR169 LD-FE-CA-BR202
			Light Duty	FE CAFE		TG-2, GL-126	Mfr	Front End	XML			LD-FE-CA-BR170 LD-FE-CA-BR201 LD-FE-CA-BR202

0	999999		Light Duty	FE CAFE		Note to CSC: The production units that apply to fuel economy (CAFE) may be different than the production units that apply to the GHG/CREE calculation. I.E. emergency vehicles, sales in U.S. Territories, etc. The GHG sales will be added in Phase 2.	Verify for Light-Duty Data Requirements	Mfr	Front End	XML		LD-FE-CA-BR136
0	999999		Light Duty	FE CAFE		Note to CSC: The production units that apply to fuel economy (CAFE) may be different than the production units that apply to the GHG/CREE calculation. I.E. emergency vehicles, sales in U.S. Territories, etc. The GHG sales will be added in Phase 2.	Mfr	Front End	XML		
			Light Duty	FE CAFE		TI-2, GL-127	Mfr	Front End	XML		LD-FE-CA-BR010 LD-FE-CA-BR011a LD-FE-CA-BR011b LD-FE-CA-BR012a LD-FE-CA-BR020 LD-FE-CA-BR165 LD-FE-CA-BR174 LD-FE-CA-BR175 LD-FE-CA-BR184 LD-FE-CA-BR185 LD-FE-CA-BR203 LD-FE-CA-BR204
			Light Duty	FE CAFE		Find 'Vehicle ID' (TI-4) via Test Number (GL-127). TI-4 --> VI-3	Verify	Back End	Pre-existing data		

0	99		Light Duty	FE CAFE		Find 'Vehicle Configuration Number' (TI-5) via Test Number (GL-127). TI-5 --> VI-4	Verify	Back End	Pre-existing data			
		N=No Y=Yes	Light Duty	FE CAFE			Verify	Back End	Pre-existing data			
		N = No Y = Yes	Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR186
		N = No averaging S = Simple averaging (Sum(i=1 to n) (FET(i) * WT(i))) H = Harmonic averaging (1/(Sum(i=1 to n) (FET(i) / WT(i))))	Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR137 LD-FE-CA-BR178
			Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR013 LD-FE-CA-BR166 LD-FE-CA-BR167 LD-FE-CA-BR180 LD-FE-CA-BR181 LD-FE-CA-BR182

Verify Light-Duty Data Requirements

0.01	0.99		Light Duty	FE CAFE			Verify Light-Duty Data Requirements	M	Front End	XML			LD-FE-CA-BR014 LD-FE-CA-BR179 LD-FE-CA-BR181 LD-FE-CA-BR182

Date   2014-July-21

Release TBD																	
EPA Data Element Number	**Long Name**	**Description**	**Parent's Name**	**XML Tag**	**Required**	**Multiplicity**	**Basic Data Type**	**Data Type Description**	**Min Length**	**Max Length**	**Pattern**	**Total Digits**	**Fractional Digits**	**Min Value**	**Max Value**	**Allowed Values**	**Industry**	**Process**
IUVP Vehicle Information																		
IV-1	**Process Code**	Select the desired process code for the current submission.	InUseVerificationProgramSubmission/ VehicleInformationDetails or InUseVerificationProgramSubmission/VehicleDeleteReportDetails	VehicleProcessCode	1		A(1)	Enumeration								N = New Vehicle Submission C = Correction Vehicle Submission D = Delete Vehicle Submission R = Request Report of Vehicle Submission	Light-Duty	IUVP
IV-2	**Manufacturer Code (key field)**	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	InUseVerificationProgramSubmission/ VehicleInformationDetails or InUseVerificationProgramSubmission/VehicleDeleteReportDetails	EPAManufacturerCode	1		A(3)	Fixed String	3	3	[A-Z0-9]{3}	3					Light-Duty	IUVP
IV-3	**Vehicle Identification Number (key field)**	Enter the 17-character vehicle identification number (VIN) found under the windshield glass on the driver's side of the dashboard.	InUseVerificationProgramSubmission/ VehicleInformationDetails or InUseVerificationProgramSubmission/VehicleDeleteReportDetails	VehicleIdentificationNumberText	1		A(17)	String	17	17		17	0				Light-Duty	IUVP
IV-4	**Emission Program (key field)**	Select the applicable in-use emission program for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails or InUseVerificationProgramSubmission/VehicleDeleteReportDetails	EmissionProgramIdentifier	1		A(4)	Enumeration								IUVB = Used to meet both EPA and California IUVP requirements IUVE = Used to meet EPA IUVP requirements (mfr) IUVC = Used to meet California IUVP requirements (mfr) IUCB = used to meet both EPA and California IUCP requirements (mfr) IUCE = Used to meet EPA IUCP requirements (mfr) IUCC = Used to meet California IUCP requirements (mfr) R1 = EPA In-Use Surveillance Testing (EPA only) R2 = EPA In-Use Surveillance Testing (EPA only) C1 = California In-Use confirmatory testing Phase 1 (ARB-only) C2 = California In-Use confirmatory testing Phase 2 (ARB-only)	Light-Duty	IUVP
IV-5	**EPA Investigation Number**	A code that may be assigned by EPA to an in-use test program- Does not apply to mfr-IUVP data.	InUseVerificationProgramSubmission/ VehicleInformationDetails	EPAInvestigationNumber	0	0..1	A(10)	String		10		10	0				Light-Duty	IUVP
IV-6	**Test Group Name**	Enter the Test Group Name for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	TestGroupName	1		A(12)	Fixed string	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}([\.][A-Z0-9]{1,6})?						Light-Duty	IUVP
IV-7	**Evaporative Family Name**	Enter the Evaporative/Refueling Family Name for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	EvaporativeRefuelingFamilyName	0	0..1	A(12)	Fixed String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4}[0-9]{4}[A-Z0-9]{3}						Light-Duty	IUVP

ID	Field Name	Description	XML Path	Element Name	Min	Max	Type	Data Type					Min	Max	Values	Program	Type
IV-7.1	**Leak Family Identifier**	Enter a unique 3-character string to identify a specific Leak Family within an Evaporative Family			0	1 per Evap Family	A(3)	String	3	3	[A-Z0-9]{3}					Light Duty	IUVP
IV-8	**Model Year**	The model year for this test vehicle configuration.	InUseVerificationProgramSubmission/ VehicleInformationDetails	ModelYear	1		N(4)	Year type (1970-2100)					1970	2100		Light-Duty	IUVP
IV-9	**Displacement**	Enter the applicable engine displacement in liters for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	EngineDisplacementValue	1		N(6,3)	Decimal			5	3	0.001	99.999		Light-Duty	IUVP
IV-10	**Division Code (Make)**	Enter the division/make code for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	ManufacturerDivisionCode	1		N(2)	Integer	2	2			0	99		Light-Duty	IUVP
IV-11	**Carline Code (Model)**	Enter the applicable carline code for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	CarlineCode	1		N(3)	Integer	3	3			0	999		Light-Duty	IUVP
IV-12	**Verify Division/Make Name**	Verify Entry of the Division Name/Make for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	VerifyDivisionMakeName	1		A(20)	String								Light-Duty	IUVP
IV-13	**Verify Carline Name**	Verify Entry of the Carline Name for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	VerifyCarlineName	1		A(32)	String								Light-Duty	IUVP
IV-12a	**Division Name (Make)**	Enter the Division Name/Make for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	DivisionMakeName	1		A(20)	String								Light-Duty	IUVP
IV-13a	**Carline Name (Model)**	Enter the Carline Name for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	CarlineName	1		A(32)	String								Light-Duty	IUVP
IV-14	**Trim Level**	Enter the trim level for this test vehicle (i.e., Super Cab, EXT, etc.)	InUseVerificationProgramSubmission/ VehicleInformationDetails	TrimLevelText	0	0..1	A(20)	String								Light-Duty	IUVP
IV-15	**Mfr Vehicle Model Name**	Enter the optional manufacturer vehicle model name. This is not a required field and may be used at the manufacturer's discretion.	InUseVerificationProgramSubmission/ VehicleInformationDetails	VehicleModelName	0	0..1	A(20)	String								Light Duty	IUVP
IV-16	**Vehicle Procured Sales Area**	Sales area from where the vehicle is obtained.	InUseVerificationProgramSubmission/ VehicleInformationDetails	VehicleProcuredSalesAreaIdentifier	1		A(2)	Enumeration							CA = California FA = Federal	Light-Duty	IUVP
IV-17	**Vehicle Procured State**	Select the state from which this test vehicle was procured.	InUseVerificationProgramSubmission/ VehicleInformationDetails	VehicleProcuredStateIdentifier	1		A(2)	Enumeration							Provide a full list of state abbreviations for the United States.	Light-Duty	IUVP
IV-18	**Vehicle Procured Altitude**	Altitude of area from where the vehicle is obtained.	InUseVerificationProgramSubmission/ VehicleInformationDetails	VehicleProcuredAltitudeIndicator	1		A(1)	Enumeration							L = Low H = High	Light-Duty	IUVP
IV-19	**Vehicle Procured Climate**	Climate of the area from where the vehicle is obtained	InUseVerificationProgramSubmission/ VehicleInformationDetails	VehicleProcuredClimateIndicator	1		A(1)	Enumeration							W = Warm area C = Cold area	Light-Duty	IUVP
IV-20	**Mileage Category**	The mileage category of this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails or InUseVerificationProgramSubmission/VehicleDeleteReportDetails	MileageCategoryIndicator	1		A(1)	Enumeration							H = High mileage (minimum of 50,000 miles) L = Low mileage (minimum of 10,000 miles)	Light-Duty	IUVP

ID	Name	Description	XPath	Element	Occur Min	Occur Max	Format	Data Type								Values	Program	Source
IV-21	75% Useful Life	Is this vehicle being used to meet the 75% useful life requirement?	InUseVerificationProgramSubmission/ VehicleInformationDetails	SeventyFivePercentUsefulLifeIndicator	1		A(1)	Enumeration								Y = Yes, vehicle used to meet 75% of useful life requirement and odometer > 75% of useful life L = Yes, vehicle used to meet 75% of useful life requirement but odometer < 75% (Requires EPA/CARB approval) N = No, vehicle not used to meet 75% of useful life requirement	Light-Duty	IUVP
IV-22	Odometer at time of Procurement	Enter the odometer reading (in miles) at the time of the vehicle procurement	InUseVerificationProgramSubmission/ VehicleInformationDetails	OdometerStartValue	1		N(7,1)	Decimal	1	7	7	1					Light Duty	IUVP
IV-23	Transmission Type?	Enter the transmission type for this test vehicle configuration.	InUseVerificationProgramSubmission/ VehicleInformationDetails	TransmissionTypeIdentifier	1		A(3)	Enumeration								A = Automatic AM = Automated Manual M = Manual SA = Semi-Automatic CVT= Continuously Variable SCV=Selectable Continuously Variable (e.g. CVT with paddles) AMS= Automated Manual- Selectable (e.g. Automated Manual with paddles) OT = Other	Light Duty	IUVP
IV-24	Transmission Type Other Description?	Enter a description of the transmission type if "Other" is selected.	InUseVerificationProgramSubmission/ VehicleInformationDetails	TransmissionTypeOtherText	1		A(30)	String	1	30							Light Duty	IUVP
IV-25	Transmission Lockup?	Is the transmission on this test vehicle configuration equipped with lockup?	InUseVerificationProgramSubmission/ VehicleInformationDetails	TransmissionLockupIndicator	1		A(1)	Enumeration								Y=Yes N=No	Light Duty	IUVP
IV-26	Creeper Gear?	Is the transmission on this test vehicle configuration equipped with a creeper gear?	InUseVerificationProgramSubmission/ VehicleInformationDetails	TransmissionCreeperGearIndicator	1		A(1)	Enumeration								Y=Yes N=No	Light Duty	IUVP
IV-27	Number of Transmission Gears?	Enter the number of transmission gears on this test vehicle configuration. If this vehicle is equipped with a "transmission type" of "CVT", enter "1" for the number of gears.	InUseVerificationProgramSubmission/ VehicleInformationDetails	TransmissionGearCount	1		N(2)	Integer					1	99			Light Duty	IUVP
IV-28	Tire Size	Enter the tire size for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	TireSizeText	0	0..1	A(12)	String									Light Duty	IUVP
IV-29	Axle Ratio	Enter the axle ratio for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	AxleRatioValue	0	0..1	N(3,2)	Decimal			3	2	0.00	9.99			Light Duty	IUVP
IV-30	Engine Code	Enter the engine code for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	EngineCodeText	0	0..1	A(14)	String									Light Duty	IUVP
IV-31	ETW	Equivalent Test Weight in pounds	InUseVerificationProgramSubmission/ VehicleInformationDetails	EquivalentTestWeightValue	0	0..1	I(5)	Enumeration								1000, 1125, 1250, 1375, 1500, 1625, 1750, 1875, 2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875, 3000, 3125, 3250, 3375, 3500, 3625, 3750, 3875, 4000, 4250, 4500, 4750, 5000, 5250, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500, 10000, 10500, 11000, 11500, 12000, 12500, 13000, 13500, 14000	Light Duty	IUVP

ID	Field	Description	Path	Element			Type	Data Type	Pattern	Min	Max						Values	Duty	Program
IV-32	Date of Inspection	Enter a valid calendar date that the inspection was conducted.	InUseVerificationProgramSubmission/ VehicleInformationDetails	VehicleInspectionDate	0	0..1	D(8)	Date	[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}									Light Duty	IUVP
IV-33	Build Date	Enter the valid calendar date on which this test vehicle was built.	InUseVerificationProgramSubmission/ VehicleInformationDetails	VehicleBuiltDate	1		D(8)	Date	[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}									Light Duty	IUVP
IV-34	Visual MIL Status	Is the MIL dashboard bulb illuminated (during key-on/engine off)?	InUseVerificationProgramSubmission/ VehicleInformationDetails	VisualMalfunctionLightIndicator	0		A(1)	Enumeration									Y = MIL Dashboard Bulb Illuminated N = MIL Dashboard Bulb Not Illuminated	Light Duty	IUVP
IV-35	Commanded MIL Status	Is the MIL commanded "On"?	InUseVerificationProgramSubmission/ VehicleInformationDetails	CommandedMalfunctionLightIndicator	1		A(1)	Enumeration									Y = MIL commanded on N = MIL commanded off	Light Duty	IUVP
IV-36	Active Trouble Codes Status	Are there any active trouble codes present during the initial inspection?	InUseVerificationProgramSubmission/ VehicleInformationDetails	ActiveTroubleCodeIndicator	1			Enumeration									Y = Active Trouble Codes Present N = No Active Trouble Codes Present	Light Duty	IUVP
IV-37	Trouble Codes	Enter all applicable 5-digit OBD diagnostic trouble codes. For example, P0### or P1###.	InUseVerificationProgramSubmission/ VehicleInformationDetails	ActiveTroubleCode	0	0..10	A(5)	Fixed String	5	5	[A-Z0-9]{5}	5						Light Duty	IUVP
IV-38	Readiness Status Complete?	Are all the readiness monitors complete?	InUseVerificationProgramSubmission/ VehicleInformationDetails	ReadinessStatusCompleteIndicator	1		A(1)	Enumeration									Y = all readiness monitors are complete N = not all readiness monitors are complete	Light Duty	IUVP
IV-39	Incomplete Readiness Status Codes	Enter the readiness monitors that are incomplete? Select all that apply.	InUseVerificationProgramSubmission/ VehicleInformationDetails	IncompleteReadinessStatusIndicator	0	0..7		Enumeration									CAT = Catalyst O2 = Oxygen Sensor EGR = Exhaust Gas Recirculation EVAP = Evaporative System HO2 = Oxygen Sensor Heater SECA = Secondary Air Ot = Other (must enter a description in the Vehicle Comment field if "Other" selected.	Light Duty	IUVP
IV-39.5	Mileage Since OBD Leak Check Performed	Enter the mileage since the OBD Leak Check was performed if the OBD Leak Status was completed. This is required if 'Readiness Status Complete?' (IV-38) equals 'Y' (Yes) or 'Incomplete Readiness Status Codes' (IV-39) does not include 'EVAP' (Evaporative System).			0	0..1	N(4)	Integer					4		1	9999		Light Duty	IUVP

IV-40	**Vehicle Rejection Code**	Enter the applicable rejection code (after the initial inspection) for this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	VehicleRejectionCode	1		I(2)	Enumeration	1	2						0 = Vehicle was <u>not</u> rejected 1 = Odometer inoperative, replaced or out of range 2 = Emissions system tampering, leaded fuel operation or aftermarket security system 3 = Severe duty operation (trailer towing [pass. cars], snow plowing, racing) 4 = Extensive collision repair or major engine repair/rebuilding 5 = Ominous noises or serious leaks from engine, transmission and exhaust 6 = Vehicle unsafe for testing 7 = MIL light flashing (severe misfire indication) 8 = Other reason for rejection (requires EPA/CARB approval)	Light Duty	IUVP
IV-41	**Vehicle Rejection Comments**	If "01" through "08" was selected for the Vehicle Rejection Code, enter an explanation of the reason this test vehicle was rejected.	InUseVerificationProgramSubmission/ VehicleInformationDetails	VehicleRejectionCommentText	0		A(500)	String	1	500							Light Duty	IUVP
IV-43	**Air Aspiration Method**	Enter the applicable air aspiration method for this test vehicle configuration.	InUseVerificationProgramSubmission/ VehicleInformationDetails	AirAspirationMethodIdentifier	1		A(2)	Enumeration								NA=Naturally aspirated TC=Turbocharged SC=Supercharged TS=Turbocharged+Supercharged OT=Other	Light-Duty	IUVP
IV-44	**Test Drive Code**	Enter the applicable test drive code for the way this test vehicle configuration was/is to be tested.	InUseVerificationProgramSubmission/ VehicleInformationDetails	TestDriveCode	1		A(1)	Enumeration								1 = Rear Drive Steering Left 2 = Rear Drive Steering Right 3 = Front Drive Steering Left 4 = Front Drive Steering Right 5 = Four Wheel Drive Steering Left 6 = Four Wheel Drive Steering Right 7 = Rear Drive Off Road 9 = Other	Light-Duty	IUVP
IV-42	**IUVP Vehicle Comments**	Enter any additional comments regarding this test vehicle.	InUseVerificationProgramSubmission/ VehicleInformationDetails	VehicleCommentText	0		A(1000)	String	1	1000							Light Duty	IUVP
IV-45	**Deletion Reason**	The reason for deleting the vehicle submission	InUseVerificationProgramSubmission/ VehicleDeleteReportDetails	DeletionReportReasonText	0	0..1	A(500)	String	1	500							Light Duty	IUVP

Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
	Manufacturer	Front End	XML	IV-BR25
	Verify	Front End	XML	LD-IUVP-IV-BR001a LD-IUVP-IV-BR001b LD-IUVP-IV-BR002 LD-IUVP-IV-BR003a LD-IUVP-IV-BR003b LD-IUVP-IV-BR006 LD-IUVP-IV-BR009 LD-IUVP-IV-BR010
	Manufacturer	Front End	XML	LD-IUVP-IV-BR001a LD-IUVP-IV-BR001b LD-IUVP-IV-BR002
	Manufacturer	Front End	XML	LD-IUVP-IV-BR001a LD-IUVP-IV-BR001b LD-IUVP-IV-BR002
	EPA/CARB	Back-end	XML	
	Manufacturer	Front End	XML	LD-IUVP-IV-BR004 LD-IUVP-IV-BR007 LD-IUVP-IV-BR009
	Manufacturer	Front End	XML	LD-IUVP-IV-BR005 LD-IUVP-IV-BR008 LD-IUVP-IV-BR010

	Manufacturer	Front End	XML	New BR: The combination of Evaporative Family Name (IV-7) and Leak Family Identifier (IV-7.1) must be an existing Evap/Refueling Family Name(EV-1) and Leak Family Identifier (EV-23) combination previously entered in the Evap/Refueling Family dataset.
	Manufacturer	Front end	XML	LD-IUVP-IV-BR007 LD-IUVP-IV-BR008 LD-IUVP-IV-BR024a LD-IUVP-IV-BR024b
	Manufacturer	Front End	XML	
For any back-end reports/views/queries, always display both the division code and the division name.	Manufacturer	Front End	XML	LD-IUVP-IV-BR011
For any back-end reports/views/queries, always display both the carline code and the carline name.	Manufacturer	Front End	XML	LD-IUVP-IV-BR012
	Verify	Back-end	XML	
	Verify	Back-end	XML	
	Manufacturer	Front-end	XML	
	Manufacturer	Front-end	XML	
	Manufacturer	Front End	XML	
	Manufacturer	Front end	XML	
	Manufacturer	Front End	XML	
	Manufacturer	Front End	XML	
	Manufacturer	Front End	XML	
	Manufacturer	Front End	XML	
	Manufacturer	Front End	XML	LD-IUVP-IV-BR001a LD-IUVP-IV-BR001b LD-IUVP-IV-BR002 LD-IUVP-IV-BR024a LD-IUVP-IV-BR024b

	Manufacturer	Front End	XML	
	Manufacturer	Front End	XML	
This field was added to be consistent with transimission info in certification/confirmatory test vehicle information.	Manufacturer	Front end	XML	LD-IUVP-IV-BR015
This field was added to be consistent with transimission info in certification/confirmatory test vehicle information.	Manufacturer	Front end	XML	LD-IUVP-IV-BR013a LD-IUVP-IV-BR013b
This field was added to be consistent with transimission info in certification/confirmatory test vehicle information.	Manufacturer	Front end	XML	LD-IUVP-IV-BR014
This field was added to be consistent with transimission info in certification/confirmatory test vehicle information.	Manufacturer	Front end	XML	
This field was added to be consistent with transimission info in certification/confirmatory test vehicle information.	Manufacturer	Front end	XML	LD-IUVP-IV-BR016
	Manufacturer	Front end	XML	
	Manufacturer	Front end	XML	
	Manufacturer	Front end	XML	
	Manufacturer	Front end	XML	

	Manufacturer	Front end	XML	LD-IUVP-IV-BR017
	Manufacturer	Front end	XML	LD-IUVP-IT-BR019a LD-IUVP-IT-BR019b
	Manufacturer	Front end	XML	
	Manufacturer	Front end	XML	
	Manufacturer	Front end	XML	LD-IUVP-IV-BR018
	Manufacturer	Front End	XML	LD-IUVP-IV-BR019a LD-IUVP-IV-BR019b
	Manufacturer	Front end	XML	
	Manufacturer	Front end	XML	LD-IUVP-IV-BR020a LD-IUVP-IV-BR020b
	Manufacturer	Front End	XML	**New BR: If 'Readiness Status Complete?' (IV-38) equals 'Y' (Yes) or 'Incomplete Readiness Status Codes' (IV-39) does not include 'EVAP' (Evaporative System) then Mileage Since OBD Leak Check Performed (IV-39.5) is required.**

	Manufacturer	Front End	XML	
	Manufacturer	Front End	XML	LD-IUVP-IV-BR022
	Manufacturer	Front end	XML	
	Manufacturer	Front end	XML	
	Manufacturer	Front End	XML	LD-IUVP-IV-BR021
	Manufacturer	Front End	XML	LD-IUVP-IV-BR023

Date   2014-September-26

Release TBD															
EPA Data Element Number	**Long Name**	**Description**	**Parent's Name**	**XML Tag**	**Required**	**Multiplicity**	**Basic Data Type**	**Data Type Description**	**Min Length**	**Max Length**	**Pattern**	**Total Digits**	**Fractional Digits**	**Min Value**	**Max Value**
IUVP Test Information															
IT-1	**Process Code**	Select the desired process code for the current submission.	InUseVerificationProgramSubmission/ TestInformationDetails or InUseVerificationProgramSubmission/TestDeleteReportDetails	TestProcessCode	1		A(1)	Enumeration							
IT-2	**Manufacturer Code (key field)**	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	InUseVerificationProgramSubmission/ TestInformationDetails or InUseVerificationProgramSubmission/TestDeleteReportDetails	EPAManufacturerCode	1		A(3)	Fixed String	3	3	[A-Z0-9]{3}	3			
IT-3	**Vehicle Identification Number (key field)**	Enter the 17-character vehicle identification number (VIN) found under the windshield glass on the driver's side of the dashboard.	InUseVerificationProgramSubmission/ TestInformationDetails or InUseVerificationProgramSubmission/TestDeleteReportDetails	VehicleIdentificationNumberText	1		A(17)	String	17	17		17	0		
IT-4	**Emission Program (key field)**	Select the applicable in-use emission program for this test.	InUseVerificationProgramSubmission/ TestInformationDetails or InUseVerificationProgramSubmission/TestDeleteReportDetails	EmissionProgramIdentifier	1		A(4)	Enumeration							
IT-5	**Verify Test # (key field)**	Each separate test for a specific VIN should have a unique test number assigned by Verify.	InUseVerificationProgramSubmission/ TestInformationDetails or InUseVerificationProgramSubmission/TestDeleteReportDetails	VerifyTestNumber	1		I(7)	Integer							
IT-6	**Manufacturer/LOD Test #**	Enter the applicable manufacturer test number for this test.	InUseVerificationProgramSubmission/ TestInformationDetails	LODMfrTestNumberText	1		A(20)	String	1	20					

					Verify Light-Duty Data Requirements											
IT-7	**Test Laboratory Code**	Enter the two-digit Verify test laboratory code (assigned in Verify's Mfr Profile Information for your company) where this test was conducted.	InUseVerificationProgramSubmission/ TestInformationDetails	TestLaboratorySiteCode	1		I(2)	Integer	1	2						
IT-8	**Laboratory Name**	The name of the test laboratory where testing was performed	InUseVerificationProgramSubmission/ TestInformationDetails	TestLaboratoryName	1		A(35)	String								
IT-9	**Odometer at start of test**	Enter the odometer reading (in miles) at the beginning of this test.	InUseVerificationProgramSubmission/ TestInformationDetails	OdometerStartValue	1		N(7,1)	Decimal	1	7		7	1			
IT-10	**Pass/Fail/Void (Federal Standards)**	Enter the Federal pass/fail/void status of this test.	InUseVerificationProgramSubmission/ TestInformationDetails	FederalPassFailIndicator	1			Enumeration								
IT-11	**Pass/Fail/Void (California Standards)**	lifornia pass/fail/void statu	InUseVerificationProgramSubmission/ TestInformationDetail s	CaliforniaPassFailIndicator	1			Enumeration								
IT-12	**Test Date**	Enter the valid calendar date at the start of this test.	InUseVerificationProgramSubmission/ TestInformationDetails	TestDate	1			Date			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}				
IT-13	**Test Condition**	Select the applicable test condition value for this test.	InUseVerificationProgramSubmission/ TestInformationDetails	TestConditionsIdentifier	1			Enumeration								

Verify Light-Duty Data Requirements

IT-14	**Test Procedure**	Select the applicable test procedure for this test.	InUseVerificationProgramSubmission/ TestInformationDetails	TestProcedureIdentifier	1			Enumeration								
IT-15	**Fuel Type**	Select the applicable fuel type for this test.	InUseVerificationProgramSubmission/ TestInformationDetails	TestFuelTypeIdentifier	1			Enumeration								
IT-16	**Shift Indicator Light**	Was the Shift Indicator Light used for this test?	InUseVerificationProgramSubmission/ TestInformationDetails	ShiftIndicatorLightUsageIndicator	0	0..1		Enumeration								
IT-17	**Transmission Mode**		InUseVerificationProgramSubmission/ TestInformationDetails	TransmissionModeIndicator	1			Enumeration								
IT-18	**Transmission Configuration As Tested**	If the vehicle has a semi-automatic transmission, enter the mode in which it was tested.	InUseVerificationProgramSubmission/ TestInformationDetails	TransmissionTestConfigurationIdentifier	0	0..1		Enumeration								

								Verify Light-Duty Data Requirements									
IT-19	**Test Altitude**	Select the applicable altitude value at which this test was conducted.	InUseVerificationProgramSubmission/ TestInformationDetails	TestAltitudeIndicator	1			Enumeration									
IT-20	**Dyno Type**	Select the applicable value for the type of dynamometer used for this test.	InUseVerificationProgramSubmission/ TestInformationDetails	DynamometerTypeIdentifier	0	0..1		Enumeration									
IT-21	**Road Load HP**	Enter the road-load horsepower (HP) for this test. This may also be referred to as dyno horsepower.	InUseVerificationProgramSubmission/ TestInformationDetails	RoadLoadHorsepowerValue	0	0..1	N(3,1)	Floating Decimal Number	3	3		3	1	0	99.9
IT-22	**Dynamometer Set Coefficient A**	Enter the single roll dynamometer set coefficient A for this test.	InUseVerificationProgramSubmission/ TestInformationDetails/ DynamometerSetTargetDetails	SetCoefficientAValue	0	0..1	R(7)	Floating Decimal Number				6	3	-999.999	999.999
IT-23	**Dynamometer Set Coefficient B**	Enter the single roll dynamometer set coefficient B for this test.	InUseVerificationProgramSubmission/ TestInformationDetails/ DynamometerSetTargetDetails	SetCoefficientBValue	0	0..1	R(7)	Floating Decimal Number				6	5	-9.99999	9.99999
IT-24	**Dynamometer Set Coefficient C**	Enter the single roll dynamometer set coefficient C for this test.	InUseVerificationProgramSubmission/ TestInformationDetails/ DynamometerSetTargetDetails	SetCoefficientCValue	0	0..1	R(7)	Floating Decimal Number				7	6	-9.999999	9.999999
IT-25	**Dynamometer Target Coefficient A**	Enter the single roll dynamometer target coefficient A for this test.	InUseVerificationProgramSubmission/ TestInformationDetails/ DynamometerSetTargetDetails	TargetCoefficientAValue	0	0..1	R(7)	Floating Decimal Number				6	3	-999.999	999.999
IT-26	**Dynamometer Target Coefficient B**	Enter the single roll dynamometer target coefficient B for this test.	InUseVerificationProgramSubmission/ TestInformationDetails/ DynamometerSetTargetDetails	TargetCoefficientBValue	0	0..1	R(7)	Floating Decimal Number				6	5	-9.99999	9.99999
IT-27	**Dynamometer Target Coefficient C**	Enter the single roll dynamometer target coefficient C for this test.	InUseVerificationProgramSubmission/ TestInformationDetails/ DynamometerSetTargetDetails	TargetCoefficientCValue	0	0..1	R(7)	Floating Decimal Number				7	6	-9.999999	9.999999
IT-38	**Mileage Category**	The mileage category of this test vehicle.	InUseVerificationProgramSubmission/ TestInformationDetails or InUseVerificationProgramSubmission/TestDeleteReportDetails	MileageCategoryIndicator	1		A(1)	Enumeration							

ID	Name	Description	XPath	Element	Min	Max	Length	Type	Col1	Col2	Col3	Int	Dec	Min Val	Max Val
IT-38.5	E10 Evaporative Test Measurement Method	Enter E10 Measurement Method to be used for Running Loss and 2-Day/3-Day Hot Soak + Diurnal emissions only (e.g. for Tier 3/LEVIII tests). Method must agree with all Evaporative tests used for the tested Evaporative Family.			0	1 per test	A(7)	String							
IT-39	Deletion Reason	The reason for deleting the test submission	InUseVerificationProgramSubmission/ TestDeleteReportDetails	DeletionReportReasonText	0	0..1	A(500)	String	1	500					
IT-28	Test Result/Emission Name	Select the desired test result name.	InUseVerificationProgramSubmission/ TestInformationDetails/TestResultDetails	TestResultIdentifier	1	0..n		Enumeration							
IT-29	Weighted result	Test results. Weighted result if more than 1 bag is measured.	InUseVerificationProgramSubmission/ TestInformationDetails/TestResultDetails	WeightedResultValue	1	0..n	N(11,7)	Decimal				11	7	-99.99	9999.9999999

IT-30	**Test Result Unit**	Select the applicable units for this test result.	InUseVerificationProgramSubmission/ TestInformationDetails/TestResultDetails	TestResultUnitIdentifier	1	0..n		Enumeration							
IT-31	**In-use Standard (Federal)**	The Federal in-use emission standard for the selected emission name.	InUseVerificationProgramSubmission/ TestInformationDetails/TestResultDetails	FederalInUseStandardValue	0	0..n	N(7,4)	Decimal			[0-9]{1,3} ([\\.][0-9] {1,4})?	7	4	0	999.9999
IT-32	**In-use Standard (California)**	Emission standard for the emission listed.	InUseVerificationProgramSubmission/ TestInformationDetails/TestResultDetails	CaliforniaInUseStandardValue	0	0..n	N(7,4)	Decimal			[0-9]{1,3} ([\\.][0-9] {1,4})?	7	4	0	999.9999
IT-33	**bag 1 result**	Bag 1 result of the emission listed in grams/mile. Required for FTP tests.	InUseVerificationProgramSubmission/ TestInformationDetails/TestResultDetails	Bag1ResultValue	0	0..n	N(11,7)	Decimal				11	7	0	9999.9999999
IT-34	**bag 2 result**	Bag 2 result of the emission listed in grams/mile. Required for FTP tests.	InUseVerificationProgramSubmission/ TestInformationDetails/TestResultDetails	Bag2ResultValue	0	0..n	N(11,7)	Decimal				11	7	0	9999.9999999
IT-35	**bag 3 result**	Bag 3 result of the emission listed in grams/mile. Required for FTP tests.	InUseVerificationProgramSubmission/ TestInformationDetails/TestResultDetails	Bag3ResultValue	0	0..n	N(11,7)	Decimal				11	7	0	9999.9999999
IT-36	**bag 4 result**	Bag 4 result of the emission listed in grams/mile. Only required for FTP tests of hybrid vehicles.	InUseVerificationProgramSubmission/ TestInformationDetails/TestResultDetails	Bag4ResultValue	0	0..n	N(11,7)	Decimal				11	7	0	9999.9999999
IT-37	**IUVP Test Comments**	Enter any additional comments for this test. Include any emission standards and emission names that failed. If this test was voided, describe the reason for the void.	InUseVerificationProgramSubmission/ TestInformationDetails	TestCommentText	0	0..1	A(1000)	String	1	1000					

Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
N = New Test Submission C = Correction Test Submission D = Delete Test Submission R = Request Report of Test Submission	Light-Duty	IUVP	Note to CSC: Use the same list of process codes for all Verify Light-Duty data submissions. Need to discuss the report function for mfrs.	Manufacturer	Front End	XML	
	Light-Duty	IUVP		Verify	Front End	XML	LD-IUVP-IT-BR001a LD-IUVP-IT-BR001b LD-IUVP-IT-BR003a LD-IUVP-IT-BR003b LD-IUVP-IT-BR004a LD-IUVP-IT-BR004b LD-IUVP-IT-BR005a LD-IUVP-IT-BR005b LD-IUVP-IT-BR013 LD-IUVP-IT-BR024 LD-IUVP-IT-BR025
	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR001a LD-IUVP-IT-BR001b LD-IUVP-IT-BR003a LD-IUVP-IT-BR003b
IUVB = Used to meet both EPA and California IUVP requirements IUVE = Used to meet EPA IUVP requirements (mfr) IUVC = Used to meet California IUVP requirements (mfr) IUCB = used to meet both EPA and California IUCP requirements (mfr) IUCE = Used to meet EPA IUCP requirements (mfr) IUCC = Used to meet California IUCP requirements (mfr) R1 = EPA Recall testing Phase 1 (EPA-only) R2 = EPA Recall testing Phase 2 (EPA-only) C1 = California In-Use confirmatory testing Phase 1 (ARB-only) C2 = California In-Use confirmatory testing Phase 2 (ARB-only)	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR001a LD-IUVP-IT-BR001b LD-IUVP-IT-BR003a LD-IUVP-IT-BR003b
	Light-Duty	IUVP	Verify should assign a sequential test number to all light-duty tests submitted to Verify (cert, fuel economy, EPA confirmatory test, IUVP, EPA in-use, etc.)	Verify	Back-end	XML	LD-IUVP-IT-BR001a LD-IUVP-IT-BR001b LD-IUVP-IT-BR006a LD-IUVP-IT-BR006b LD-IUVP-IT-BR006c
	Light-Duty	IUVP		Manufacturer	Front End	XML	

Verify Light-Duty Data Requirements

	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR007
	Light-Duty	IUVP	(Note- The test lab name will be pulled from the Manufacturer Info for the specified test lab code. The test lab name must be in the XML file that is sent to CARB.)	Verify	Front End	XML	
	Light Duty	IUVP		Manufacturer	Front End	XML	
P = Pass F = Fail (describe what Federal standards/emissions it failed in the Test Comments field) V = Void (explain reasons why in the comments field) NA = not applicable (not certified to Federal standards)	Light-Duty	IUVP	We are deleting the option for "A - Incomplete test (describe in the comments field).	Manufacturer	Front End	XML	LD-IUVP-IT-BR008
P = Pass F = Fail (describe what California standards/emissions it failed in the Test Comments field) V = Void (explain reasons why in the comments field) NA = not applicable (not certified to California standards)	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR009
	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR012 LD-IUVP-IT-BR019a LD-IUVP-IT-BR019b
AR = As received AM = After maintenance (Explain what maintenance was performed in the Test Comments field) SS = Set to spec (EPA & ARB only)	Light-Duty	IUVP		Manufacturer	Front End	XML	

2 = CVS 75 AND LATER (W/O CAN. LOAD)
3 = HWFE (HIGHWAY TEST)
9 = HWY80 (80 mph Highway Test)
10 = IDLE CO
11 = COLD CO
15 = SPITBACK TEST
16 = Hot 1435 LA92
21 = FED FUEL 2 DAY EXH (BUTANE LOAD)
23 = FED FUEL 2 DAY EVAP (BUTANE)
24 = FED FUEL REFUEL (ORVR) (BUTANE)
25 = CA FUEL 2 DAY EXH (BUTANE LOAD)
27 = CA FUEL 2 DAY EVAP (BUTANE LOAD)
31 = FED FUEL 3 DAY EXH (BUTANE LOAD)
32 - FED FUEL RUNNING LOSS
34 = FED FUEL 3 DAY EVAP(BUTANE LOAD)
35 = CA FUEL 3 DAY EXH (BUTANE LOAD)
37 = CA FUEL RUNNING LOSS
38 = CA FUEL 3 DAY EVAP (BUTANE LOAD)
41 = FED FUEL 2 DAY EXH(HEAT TO LOAD)
43 = FED FUEL 2DAY EVAP(HEAT TO LOAD)
44 = FED REFUEL (ORVR) (HEAT TO LOAD)
45 = CA FUEL 2 DAY EXH (HEAT TO LOAD)
47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD)
51 = CA FUEL 50 DEG(F) EXHAUST TEST
52 = FED FUEL 50 DEG(F) EXHAUST TEST
60 = AC17 - Manual A/C Controls
61 = AC17 - Automatic A/C Controls
64 = Evap CARB Fuel Only (Rig) Test
65 = Evap Canister Bleed Test
66 = Leak Test - Evap Fuel System OBD
67 = Leak Test - Port Near Canister
68 = Leak Test - Port Near Fuel Pipe
69 = Leak Test - Evap Gas Cap
72 = CST TWO SPEED IDLE TEST
76 = CST PRECD 2 SPD IDLE (EPA ONLY)
81 = Charge Depleting UDDS
83 = Charge Depleting US06
84 = Charge Depleting Highway
85 = Charge Depleting SC03
86 = Charge Depleting 20 Degree F FTP
87 = A/C Idle Test- Manual A/C
88 = A/C Idle Test- Automatic A/C
90 = US06
95 = SC03
96 = US06 Bag 2 Only

						Verify Light-Duty Data Requirements
Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR020

1 = INDOLENE 30
6 = EPA UNLEADED GASOLINE
7 = INDUSTRIAL UNLEADED 100 OCTANE
8 = NUMBER 1 FUEL OIL
9 = CERT DIESEL 300 PPM SULFUR
10 = NATURAL GAS
18 = CARB CERT DIESEL 7-15 PPM SULFUR
19 = FEDERAL CERT DIESEL 7-15 PPM SULFUR
22 = SPECIAL UNLEADED 91 RON
23 = CARB PHASE II GASOLINE
24 = COLD CO REGULAR (CERT)
25 = COLD CO PREMIUM (CERT)
26 = COLD CO REGULAR (TIER 2)
27 = COLD CO PREMIUM (TIER 2)
28 = COLD CO E10 REGULAR GASOLINE (TIER 3)
29 = COLD CO E10 PREMIUM GASOLINE (TIER 3)
30 = COLD CO DIESEL 7-15 PPM SULFUR
31 = METHANOL (CERT M10)
32 = METHANOL (CERT M50)
33 = METHANOL (CERT M85)
34 = METHANOL (CERT M100)
36 = E70 (70% ETHANOL 30% EPA UNLEADED GASOLINE)
37 = E10 (10% ETHANOL 90% EPA UNLEADED GASOLINE)
38 = E85 (85% ETHANOL 15% EPA UNLEADED GASOLINE)
41 = CNG
42 = LPG
43 = E10 (10% ETHANOL 90% CAL PHASE II GASOLINE)
44 = E85 (85% ETHANOL 15% CAL PHASE II GASOLINE)
45 = E70 (70% ETHANOL 30% CAL PHASE II GASOLINE)
46 = CARB LEV3 E10 REGULAR GASOLINE
47 = CARB LEV3 E10 PREMIUM GASOLINE
48 = TIER 3 E10 REGULAR GASOLINE (9 RVP)
49 = TIER 3 E10 PREMIUM GASOLINE (9 RVP)
50 = HYDROGEN
58 = TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR Only)
59 = TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR Only)
61 = TIER 2 CERT GASOLINE
62 = ELECTRICITY
71 = E100 (100% ETHANOL)

Light-Duty	IUVP		Manufacturer	Front End	XML	

Y = Yes
N = No

Light-Duty	IUVP		Manufacturer	Front End	XML	

N = Not applicable
P = Power
E = Economy

Light-Duty	IUVP		Manufacturer	Front End	XML	

A = Automatic mode
M = Manual mode

Light-Duty	IUVP		Manufacturer	Front End	XML	

						Verify Light-Duty Data Requirements
L = Low Altitude H = High Altitude						
	Light-Duty	IUVP		Manufacturer	Front End	XML	
HY = Hydrokinetic (8.65 inch twin rolls) E1 = Electric (8.65 inch twin rolls) E2 = Electric (20 inch twin rolls) E3 = Electric (48 inch single roll) E4 = Electric (24 inch single roll) 4A = 4WD Electric (48 inch single roll) 4B = 4WD Electric (24 inch single roll) 4C = 4WD Electric (20 inch twin rolls)	Light-Duty	IUVP		Manufacturer	Front End	XML	
	Light-Duty	IUVP		Manufacturer	Front End	XML	
	Light-Duty	IUVP		Manufacturer	Front End	XML	
	Light-Duty	IUVP		Manufacturer	Front End	XML	
	Light-Duty	IUVP		Manufacturer	Front End	XML	
	Light-Duty	IUVP		Manufacturer	Front End	XML	
	Light-Duty	IUVP		Manufacturer	Front End	XML	
	Light-Duty	IUVP		Manufacturer	Front End	XML	
H = High mileage (minimum of 50,000 miles) L = Low mileage (minimum of 10,000 miles)	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR001a LD-IUVP-IT-BR001b LD-IUVP-IT-BR003a LD-IUVP-IT-BR003b LD-IUVP-IT-BR018

ACTUAL = Actual Total Hydrocarbon Equivalent Measurement (with speciation) CALC = Calculated (1.08 x FID Total Hydrocarbons) FID-EPA = Actual FID w/o Speciation (EPA Only)	Light Duty	IUVP		Manufacturer/ LOD	Front End	XML	**New BRs:** If the Fuel Type (IT-15) equals '46' (CARB LEV3 E10 REGULAR GASOLINE), '47' (CARB LEV3 E10 PREMIUM GASOLINE), '48' (TIER 3 E10 REGULAR GASOLINE), or '49' (TIER 3 E10 PREMIUM GASOLINE) AND the Test Procedure (IT-14) equals '23' (FED FUEL 2 DAY EVAP (BUTANE)), '27' (CA FUEL 2 DAY EVAP (BUTANE LOAD)), '32' (FED FUEL RUNNING LOSS), '34' (FED FUEL 3 DAY EVAP(BUTANE LOAD)), '37' ('CA FUEL RUNNING LOSS'), '38' (CA FUEL 3 DAY EVAP (BUTANE LOAD)), '43' (FED FUEL 2DAY EVAP(HEAT TO LOAD)), '47' (CA FUEL 2 DAY EVAP(HEAT TO LOAD)), '58' (TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR Only)), or '59' (TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR Only)), then E10 Evaporative Test Measurement Method (IT-38.5) is required. If the Submitting Manufacturer Code is not 'LOD' or 'EPA' then E10 Evaporative Test Measurement Method (IT-38.5) must equal the value of E10 Evaporative Test Measurement Method (EV-32). If the Submitting Manufacturer Code is 'LOD' or 'EPA' then E10 Evaporative Test Measurement Method (IT-38.5) must either match the E10 Evaporative Test Measurement Method (EV-32), or, must equal 'FID-EPA' (Actual FID w/o Speciation (EPA Only)). LD-IUVP-IT-BR015
	Light-Duty	IUVP		Manufacturer	Front End	XML	
HC-TOTAL (Total Hydrocarbon) HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only) CO (Carbon Monoxide) CO2 (Carbon Dioxide) CREE (Carbon-Related Exhaust Emissions) OPT-CREE (Optional Carbon-Related Exhaust Emissions) COMB-CREE (Combined Carbon-Related Exhaust Emissions) COMB-OPT-CREE (Combined Optional Carbon-Related Exhaust Emissions) NOX (Nitrogen Oxides) PM (Particulate Matter) PM-COMP (SFTP Composite Particulate Matter) HC-NM (Non-methane Hydrocarbon) OMHCE (Organic material Hydrocarbon equivalent) OMNMHCE (Organic material non-methane Hydrocarbon equivalent) NMOG (Non-methane organic gases (California)) HCHO (Formaldehyde) H3C2HO (Acetaldehyde) HC-NM+NOX (SFTP Non-methane Hydrocarbon+Nitrogen Oxides for US06 or SC03) HC-NM+NOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides) CO-COMP (SFTP Composite Carbon Monoxide) NMOG-COMP (SFTP Composite Non-methane Organic Gases) NMOG+NOX (Non-methane Organic Gases Plus Nitrogen Oxides) NMOG+NOX-COMP (SFTP Composite Non-methane Organic Gases Plus Nitrogen Oxides) ETHANOL (C2H5OH- Ethanol) FE BAG 1 (Bag 1 Fuel Economy) FE BAG 2 (Bag 2 Fuel Economy) FE BAG 3 (Bag 3 Fuel Economy) FE BAG 4 (Bag 4 Fuel Economy) CO2 BAG 1 (Bag 1 Carbon Dioxide) CO2 BAG 2 (Bag 2 Carbon Dioxide) CO2 BAG 3 (Bag 3 Carbon Dioxide) CO2 BAG 4 (Bag 4 Carbon Dioxide) MFR FE (Manufacturer Fuel Economy) HC (Hydrocarbon for Running Loss and ORVR) METHANE (CH4) (Methane) METHANOL (CH3OH) (Methanol) N2O (Nitrous Oxide) SPITBACK (Spitback Hydrocarbon in grams) DT-IWRR (Drive Trace Inertia Work Ratio Rating) DT-ASCR (Drive Trace Absolute Speed Change Rating) DT-EER (Drive Trace Energy Economy Rating) LEAK-DIA - Effective Leak Diameter (inches) LEAK-GAS CAP - Gas Cap Leakage (cc/min) Allowed For Charge Depleting Test Procedures Only: AMP-HRS (Integrated Amp-hours) START-SOC (System Start State of Charge Watt-hours) END-SOC (System End State of Charge Watt-hours) ACT-DISTANCE (Actual Distance Driven (miles)) AS-VOLT (Average System Voltage)	Light-Duty	IUVP		Manufacturer	Front End	XML	**New BRs:** If Test Procedure (IT-14) is not equal to '3' (HWFE Highway Highway Test) then Test Result/Emission Name (IT-28) cannot equal 'COMB-CREE' or 'COMB-OPT-CREE'. If Model Year (IV-8) of the IUVP test vehicle is >= 2012 and Test Procedure (IT-14) is equal to '3' (HWFE Highway Test) then Test Result/Emission Name (IT-28) must include 'COMB-CREE' or 'COMB-OPT-CREE'. If the Fuel Type (IT-15) equals '46' (CARB LEV3 E10 REGULAR GASOLINE), '47' (CARB LEV3 E10 PREMIUM GASOLINE), '48' (TIER 3 E10 REGULAR GASOLINE), or '49' (TIER 3 E10 PREMIUM GASOLINE) AND the Test Procedure (IT-14) equals '23' (FED FUEL 2 DAY EVAP (BUTANE)), '27' (CA FUEL 2 DAY EVAP (BUTANE LOAD)), '32' (FED FUEL RUNNING LOSS), '34' (FED FUEL 3 DAY EVAP(BUTANE LOAD)), '37' ('CA FUEL RUNNING LOSS'), '38' (CA FUEL 3 DAY EVAP (BUTANE LOAD)), '43' (FED FUEL 2DAY EVAP(HEAT TO LOAD)), '47' (CA FUEL 2 DAY EVAP(HEAT TO LOAD)), '58' (TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR Only)), or '59' (TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR Only)), then Test Result/Emission Name (IT-28) must include 'HC-TOTAL-EQUIV'. LD-IUVP-IT-BR021 LD-IUVP-IT-BR022 LD-IUVP-IT-BR023 LD-IUVP-IT-BR026 LD-IUVP-IT-BR027
	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR028

Verify Light-Duty Data Requirements

g/m = grams per mile g/t = grams per test (applies to evaporative tests) mpg = miles per gallon g/g = grams per gallon (dispensed) for ORVR tests Ah = amp-hours Wh = watt-hours Mi = miles V = voltage in = inches cc/min = cubic centimeters per minute N/A = not applicable	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR029
	Light-Duty	IUVP		Manufacturer	Back-end	XML	
	Light-Duty	IUVP		Manufacturer	Back-end	XML	
	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR016
	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR016
	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR016
	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR017
	Light-Duty	IUVP		Manufacturer	Front End		LD-IUVP-IT-BR010 LD-IUVP-IT-BR011 LD-IUVP-IT-BR014

Date   2014-July-21

These equations are used by Verify to calculate CREE and Optional CREE if they are selected as Test Result/Emission Name in Test Information.

Gasoline - 40 CFR 600.113-12(h)(2)

CREE	40 CFR 600.113-12(h)(2)(i)	= [(CWF / 0.273) * **HC**] + (1.571 * CO) + CO2
OptCREE	40 CFR 600.113-12(h)(2)(ii)	= [(CWF / 0.273) * **NMHC**] + (1.571 * CO) + CO2 **+ (298 * N2O) + (25 * CH4)**

Diesel - 40 CFR 600.113-12(i)(2)

CREE	40 CFR 600.113-12(i)(2)(i)	= (3.172 * **HC**) + (1.571 * CO) + CO2
OptCREE	40 CFR 600.113-12(i)(2)(ii)	= (3.172 * **NMHC**) + (1.571 * CO) + CO2 **+ (298 * N2O) + (25 * CH4)**

Methanol - 40 CFR 600.113-12(j)(2)

CREE	40 CFR 600.113-12(j)(2)(i)	= [(CWF / 0.273) * **HC**] + (1.571 * CO) + (1.374 * CH3OH) + (1.466 * HCHO) + CO2
OptCREE	40 CFR 600.113-12(j)(2)(ii)	= [(CWF / 0.273) * **NMHC**] + (1.571 * CO) + (1.374 * CH3OH) + (1.466 * HCHO) + CO2 **+ (298 * N2O) + (25 * CH4)**

CNG - 40 CFR 600.113-12(k)(2)

CREE	40 CFR 600.113-12(k)(2)(i)	= [(CWFNMHC / 0.273) * NMHC] + (1.571 * CO) + CO2 **+ (2.743 * CH4)**
OptCREE	40 CFR 600.113-12(k)(2)(ii)	= [(CWFNMHC / 0.273) * NMHC] + (1.571 * CO) + CO2 **+ (298 * N2O) + (25 * CH4)**

Ethanol - 40 CFR 600.113-12(l)(2)

CREE	40 CFR 600.113-12(l)(2)(i)	= [(CWF / 0.273) * **HC**] + (1.571 * CO) + (1.374 * CH3OH) + (1.466 * HCHO) + (1.911 * C2H5OH) + (1.998 * C2H4O) + CO2
OptCREE	40 CFR 600.113-12(l)(2)(ii)	= [(CWF / 0.273) * **NMHC**] + (1.571 * CO) + (1.374 * CH3OH) + (1.466 * HCHO) + (1.911 * C2H5OH) + (1.998 * C2H4O) + CO2 **+ (298 * N2O) + (25 * CH4)**

Notes:

For HC, use the Verify name of HC-TOTAL

Methane = CH4

Methanol = CH3OH

Ethanol = C2H5OH

Formaldehyde = HCHO

Acetaldehyde = H3C2HO or C2H4O

Items in bold above are the items that are different between the CREE and Opt-CREE equations for each fuel type.

For each emission name, use the rounded test result (CO2 rounded to whole number) with the 120k DF applied if applicable (if aged components there may not be DFs). The final CREE/Opt-CREE is then rounded to a whole number.

Target Fuel Economy and Target CO2 for a footprint are based on the following equations:

49 CFR 531.5 & 533.5, CAFE Standards	49 CFR 531.5 & 533.5, CAFE Standards	86 CFR 1818-12, GHG Standards
Reformed **Target FE** (Truck 2008-2011) (Car 2011 only)	Reformed **Target FE** (2012 +)	Target CO2 (2012 +)

$$\text{Target FE} = \cfrac{1}{\cfrac{1}{A} + \left(\cfrac{1}{B} - \cfrac{1}{A}\right) \cfrac{e^{(Footprint - C)/D}}{1 + e^{(Footprint - C)/D}}}$$

Per regulation: e = 2.718

$$\text{Target FE} = \cfrac{1}{\text{Min}\left(\text{Max}\left(C \times Footprint + D, \cfrac{1}{A}\right), \cfrac{1}{B}\right)}$$

$$\text{Target CO}_2 = A \times Footprint + B$$

If Footprint <= 41 SqFt, Target CO2 = C

If Footprint > 56 SqFt, Target CO2 = D

Date of Change	Description	Data Element	Version #	Enhancement to Baseline (Y/N)	Comments
CAFÉ					**Items in yellow may require analysis to confirm baseline enhancements that may affect project cost and/or timeline**
11/23/2010	Added "/GHG" to multiplicity column	CA-3		N	
11/23/2010	Added "/GHG" to multiplicity column	CA-0		N	
11/23/2010	Added "/GHG" to multiplicity column	CA-1		N	
11/23/2010	Changed DE name from "CAFE Compliance Category to "CAFE/GHG Compliance Category"; added "/GHG" to description, multiplicity; removed "DP = Domestic Passenger Vehicles IP = Import Passenger Vehicles" from allowed values and added "PV = Passenger Vehicles";	CA-4		N	
11/23/2010	New DE "GHG Exempt Indicator"	CA-127			
11/23/2010	New DE " GHG Calculation Method"	CA-128			
11/23/2010	New DE "For OCREE calculations, should N2O emissions always default to .010gpm?"	CA-129			OPT-CREE N2O Default Indicator
11/23/2010	Added "/GHG" to element name, description, multiplicity	CA-4.5		N	
11/23/2010	New DE "EPA Calculated Official Model Year GHG Production Units"	CA-130			
11/23/2010	New DE "EPA Calculated Official Model Year GHG TLAAS Production Units"	CA-131			
11/23/2010	Changed DE name from "EPA Official Model Year Truck CAFE Production Units" to "EPA Calculated Official Model Year Truck CAFE Production Units" ; Added new BR "Required if CAFE/GHG Compliance Category = Light Truck"	CA-53		N	
11/23/2010	Changed DE name from "EPA Official Model Year Domestic Passenger Vehicle CAFE Production Units" to "EPA Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units" ; Added BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-54		N	
11/23/2010	Changed DE name from "EPA Official Model Year Import Passenger Vehicle CAFE Production Units" to "EPA Calculated Official Model Year Import Passenger Vehicle CAFE Production Units"; Added new BR: Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-55		N	
11/23/2010	New DE "Manufacturer Calculated Official Model Year GHG Production Units"	CA-132			
11/23/2010	New DE "Manufacturer Calculated Official Model Year GHG TLAAS Production Units"	CA-133			
11/23/2010	Changed DE name from "Manufacturer Official Model Year Truck CAFE Production Units" to "Manufacturer Calculated Official Model Year Truck CAFE Production Units"; Added: Parent's name, XML Tag, new BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-50		N	
11/23/2010	Changed DE Name from"Manufacturer Official Model Year Domestic Passenger Vehicle CAFE Production Units" to "Manufacturer Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units"; Added Parent's name, XML Tag, new BR: Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-51		N	
11/23/2010	Changed DE Name from "Manufacturer Official Model Year Import Passenger Vehicle CAFE Production Units" to "Manufacturer Calculated Official Model Year Import Passenger Vehicle CAFE Production Units"; Added Parent's name, XML Tag, new BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-52		N	
11/23/2010	New DE "EPA Calculated Baseline Average GHG Unrounded 4 Decimal"	CA-134			

Date	Description	DE			
11/23/2010	New DE " EPA Calculated Baseline Average GHG TLAAS Unrounded 4 Decimal"	CA-135			
11/23/2010	Changed DE name from "EPA Baseline Truck CAFE Unrounded 4 Decimal" to "EPA Calculated Baseline Truck CAFE Unrounded 4 Decimal"; Changed min. value from 1 to 0, new BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-59		N	
11/23/2010	Changed DE name from "EPA Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; Added new BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-60		N	
11/23/2010	Changed DE name from "EPA Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal; new BR added: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-61		N	
11/23/2010	New DE "EPA Calculated Baseline Average GHG Rounded Whole Number"	CA-136			
11/23/2010	New DE "EPA Calculated Baseline Average GHG TLAAS Rounded Whole Number"	CA-137			
11/23/2010	Changed DE name from "EPA Baseline Truck CAFE Rounded 1 Decimal" to "EPA Calculated Baseline Truck CAFE Rounded 1 Decimal"; Changed Basic Data Type from "N(4,1) to N(5,1)"; Changed Min Value from 1 to 0; Added "Light Duty" to Industry; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-63		N	
11/23/2010	Changed DE name from "EPA Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal" to "EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-66		N	
11/23/2010	Changed DE name from "EPA Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal" to "EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-67		N	
11/23/2010	Changed DE name from "EPA Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "EPA Calculated Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-70		N	
11/23/2010	Changed DE name from "EPA Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "EPA Calculated Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-71		N	
11/23/2010	New DE "Manufacturer Calculated Baseline Average GHG Unrounded 4 Decimal"	CA-138			
11/23/2010	New DE "Manufacturer Calculated Baseline Average GHG TLAAS Unrounded 4 Decimal"	CA-139			
11/23/2010	Changed DE name from "Manufacturer Baseline Truck CAFE Unrounded 4 Decimal" to "Manufacturer Calculated Baseline Truck CAFE Unrounded 4 Decimal"; Added Parent's Name, XML Tag; Changed min. value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-56		N	

Date	Change	DE			
11/23/2010	Changed DE name from "Manufacturer Baseline Truck CAFE Unrounded 4 Decimal" to "Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-57		N	
11/23/2010	Changed DE name form "Manufacturer Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-58		N	
11/23/2010	New DE "Manufacturer Calculated Baseline Average GHG Rounded Whole Number"	CA-140		(yellow)	
11/23/2010	New DE "Manufacturer Calculated Baseline Average GHG TLAAS Rounded Whole Number"	CA-141		(yellow)	
11/23/2010	Changed DE name from "Manufacturer Baseline Truck CAFE Rounded 1 Decimal" to "Manufacturer Calculated Baseline Truck CAFE Rounded 1 Decimal"; Added Parent's Name, XML Tag; Changed min. value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-62		N	
11/23/2010	Changed DE name from "Manufacturer Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal" to "Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-64		N	
11/23/2010	Changed DE name from "Manufacturer Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal" to "Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal";	CA-65		N	
11/23/2010	Changed DE name from "Manufacturer Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-68		N	
11/23/2010	Changed DE name from "Manufacturer Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-69		N	
11/23/2010	New DE "EPA Calculated Final Average GHG Unrounded 4 Decimal"	CA-142		(yellow)	
11/23/2010	New DE "EPA Calculated Final Average GHG TLAAS Unrounded 4 Decimal"	CA-143		(yellow)	
11/23/2010	Changed DE name from "EPA Final Truck CAFE Unrounded 4 Decimal" to "EPA Calculated Final Truck CAFE Unrounded 4 Decimal"; Changed Min Value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-75		N	
11/23/2010	Changed DE name from "EPA Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-76		N	

11/23/2010	Changed DE name from "EPA Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-77		N	
11/23/2010	New DE "EPA Calculated Final Average GHG Rounded Whole Number"	CA-144			
11/23/2010	New DE "EPA Calculated Final Average GHG TLAAS Rounded Whole Number"	CA-145			
11/23/2010	Changed DE name from "EPA Final Truck CAFE Rounded 1 Decimal" to "EPA Calculated Final Truck CAFE Rounded 1 Decimal"; Changed Min Value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-79		N	
11/23/2010	Changed DE name from "EPA Final Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal" to "EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-82		N	
11/23/2010	Changed DE name from "EPA Final Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal" to " EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-83		N	
11/23/2010	Changed DE name from "EPA Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "EPA Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-86		N	
11/23/2010	Changed DE name from "EPA Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "EPA Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-87		N	
11/23/2010	New DE "Manufacturer Calculated Final Average GHG Unrounded 4 Decimal"	CA-146			
11/23/2010	New DE "Manufacturer Calculated Final Average GHG TLAAS Unrounded 4 Decimal"	CA-147			
11/23/2010	Changed DE name from "Manufacturer Final Truck CAFE Unrounded 4 Decimal" to "Manufacturer Calculated Final Truck CAFE Unrounded 4 Decimal"; Added Parent's Name, XML Tag; Changed Min Value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-72		N	
11/23/2010	Changed DE name from "Manufacturer Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-73		N	
11/23/2010	Changed DE name from "Manufacturer Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "Manufacturer Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-74		N	
11/23/2010	New DE "Manufacturer Calculated Final Average GHG Rounded Whole Number"	CA-148			
11/23/2010	New DE "Manufacturer Calculated Final Average GHG TLAAS Rounded Whole Number"	CA-149			

Date	Change Description	DE		Flag	Comment
11/23/2010	New DE "Manufacturer Calculated Final Truck CAFE Rounded 1 Decimal";	CA-150		*(yellow)*	this DE replaced CA-78 from the previous spreadsheet	Verify Light-Duty Data Requirements
11/23/2010	Changed DE name from "Manufacturer Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal" to "Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-80		N	
11/23/2010	Changed DE name from "Manufacturer Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal" to "Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-81		N	
11/23/2010	Changed DE name from "Manufacturer Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-84		N	
11/23/2010	Changed DE name from "Manufacturer Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-85		N	
11/23/2010	New DE "EPA Official Average GHG Grams Per Mile"	CA-151		*(yellow)*	
11/23/2010	New DE "EPA Official Average GHG TLAAS Grams Per Mile"	CA-152		*(yellow)*	
11/23/2010	Changed Min Value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-91		N	
11/23/2010	New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-92		N	
11/23/2010	New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-93		N	
11/23/2010	New DE "Manufacturer Calculated Official Average GHG Grams Per Mile"	CA-153		*(yellow)*	
11/23/2010	New DE "Manufacturer Calculated Official Average GHG TLAAS Grams Per Mile"	CA-154		*(yellow)*	
11/23/2010	Changed DE name from "Manufacturer Official Truck CAFE Miles Per Gallon" to "Manufacturer Calculated Official Truck CAFE Miles Per Gallon"; Added Parent's Name, XML Tag; Changed Min Value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-88		N	
11/23/2010	Changed DE name from "Manufacturer Official Domestic Passenger Vehicle CAFE Miles Per Gallon" to "Manufacturer Calculated Official Domestic Passenger Vehicle CAFE Miles Per Gallon"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-89		N	
11/23/2010	Changed DE name from "Manufacturer Official Import Passenger Vehicle CAFE Miles Per Gallon" to "Manufacturer Calculated Official Import Passenger Vehicle CAFE Miles Per Gallon"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-90		N	
11/23/2010	Noted that Parent's name and XML tag are missing	CA-11		N	

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11/23/2010	Basic data type changed to "A(12)"; change to fixed string; Min/Max lengths changed to 12 and 12; Min value changed to 4, Max value deleted;	CA-14.1		N	
11/23/2010	New DE "CAFE Domestic/Import Indicator"	CA-155			
11/23/2010	New DE "GHG TLAAS Indicator"	CA-156			
11/23/2010	New DE "GHG Advanced Technology Indicator"	CA-157			
11/23/2010	New DE "Footprint Final Model Year GHG Production Units"	CA-158			
11/23/2010	New DE "EPA Calculated Footprint Target GHG Value (grams per mile)"	CA-159			
11/23/2010	Deleted entire DE	CA-21			
11/23/2010	Changed DE name from "EPA Footprint Target FE Value (miles per gallon)" to "EPA Calculated Footprint Target FE Value (miles per gallon)";	CA-21.5		N	
11/23/2010	Deleted entire DE	CA-21.7			
11/23/2010	New DE "Manufacturer Calculated Unrounded GHG Standard"	CA-160			
11/23/2010	New DE "EPA Calculated Unrounded GHG Standard"	CA-161			
11/23/2010	New DE "EPA Calculated Unrounded GHG Standard Discrepancy Value"	CA-162			
11/23/2010	New DE "EPA Calculated Final GHG Standard"	CA-163			
11/23/2010	New DE "Manufacturer GHG Comments"	CA-164			
11/23/2010	Changed Min. Value from "0.0001" to "0.0000"	CA-22		N	
11/23/2010	Changed Min. Value from "0.0001" to "0.0000"	CA-22.3		N	
11/23/2010	Changed Min. Value from "0.0001" to "0.0000"	CA-22.7		N	
11/23/2010	Added Parent's name, XML tag	CA-25.1		N	
11/23/2010	New DE "EPA Calculated Baseline Model Type City GHG Value 1 decimal"	CA-165			
11/23/2010	New DE "EPA Calculated Baseline Model Type Highway GHG Value 1 decimal"	CA-166			
11/23/2010	New DE "EPA Calculated Baseline Model Type Combined GHG Value 1 decimal"	CA-167			
11/23/2010	New DE "EPA Calculated Baseline Model Type Combined GHG Value Whole Number"	CA-168			
11/23/2010	New DE "EPA Calculated Final Model Type City GHG Value 1 decimal"	CA-169			
11/23/2010	New DE "EPA Calculated Final Model Type Highway GHG Value 1 decimal"	CA-170			
11/23/2010	New DE "EPA Calculated Final Model Type Combined GHG Value 1 decimal"	CA-171			
11/23/2010	New DE "EPA Calculated Final Model Type Combined GHG Value Whole Number"	CA-172			
11/23/2010	New DE "EPA Calculated Model Type GHG Production Units"	CA-173			
11/23/2010	New DE "EPA Calculated Baseline Base Level City GHG Value 1 decimal"	CA-174			
11/23/2010	New DE "EPA Calculated Baseline Base Level Highway GHG Value 1 decimal"	CA-175			
11/23/2010	New DE "EPA Calculated Baseline Base Level Combined GHG Value 1 decimal"	CA-176			
11/23/2010	New DE "EPA Calculated Final Base Level City GHG Value 1 decimal"	CA-177			
11/23/2010	New DE "EPA Calculated Final Base Level Highway GHG Value 1 decimal"	CA-178			
11/23/2010	New DE "EPA Calculated Final Base Level Combined GHG Value 1 decimal"	CA-179			
11/23/2010	New DE "EPA Calculated Base Level GHG Production Units"	CA-180			
11/23/2010	New DE "EPA Calculated Baseline Configuration City GHG Value 1 decimal"	CA-181			
11/23/2010	New DE "EPA Calculated Baseline Configuration Highway GHG Value 1 decimal"	CA-182			
11/23/2010	New DE "EPA Calculated Baseline Configuration Combined GHG Value 1 decimal"	CA-183			
11/23/2010	New DE "EPA Calculated Final Configuration City GHG Value 1 decimal"	CA-184			
11/23/2010	New DE "EPA Calculated Final Configuration Highway GHG Value 1 decimal"	CA-185			
11/23/2010	New DE "EPA Calculated Final Configuration Combined GHG Value 1 decimal"	CA-186			

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Date	Description	DE		Flag	
11/23/2010	New DE "EPA Calculated Configuration GHG Production Units"	CA-187			
11/23/2010	Added DE name (missing from previous DR spreadsheet) "EPA Calculated Baseline Configuration City FE Value 4 decimal"	CA-110		N	
11/23/2010	Deleted Min. and Max values; edited enumeration values;	CA-31		N	
11/23/2010	New DE "EPA Calculated Baseline Subconfiguration City GHG Value 1 decimal"	CA-188			
11/23/2010	New DE "EPA Calculated Baseline Subconfiguration Highway GHG Value 1 decimal"	CA-189			
11/23/2010	New DE "EPA Calculated Final Subconfiguration City GHG Value 1 decimal"	CA-190			
11/23/2010	New DE "EPA Calculated Final Subconfiguration Highway GHG Value 1 decimal"	CA-191			
11/23/2010	New DE "EPA Calculated Subconfiguration GHG Production Units"	CA-192			
11/23/2010	Deleted entire DE	CA-119			
11/23/2010	Deleted entire DE	CA-122			
11/23/2010	Added Parent's name, XML tag	CA-124		N	
11/23/2010	Added Parent's name, XML tag	CA-125		N	
11/23/2010	Added Parent's name, XML tag	CA-126		N	
11/23/2010	Added Parent's name, XML tag	CA-34		N	
11/23/2010	New DE "Manufacturer Subconfiguration Final Model Year GHG Production Units"	CA-193			
11/23/2010	Added Parent's name, XML tag	CA-32		N	
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			
6/6/2011	Change enumeration from OCREE to Opt-Cree	S-9, D-10, E-9			
6/8/2011	Change enumeration from OCREE to OPT-CREE	S-9, D-10, E-9			
6/21/2011	Changed Element name to 'OPT-CREE N2O Default Indicator'	D-10			
6/21/2011	Changed BR from LD-FE-CA-BR039 to LD-FE-CA-BR156	AC-20			
6/21/2011	Deleted BR LD-FE-CA-BR109	AC-142			
9/13/2011	Changed Min value from 1 to 0	CA-158 & CA-20		Y	
10/7/2011	Updated Parent Tag, Collection Point, Collection Type based on schema	CA-11.5, 12,13,14.5			
10/7/2011	Updated long name	CA124, 20			
10/7/2011	Updated the cardinality from true to false	CA-26,27,28,29,29.5,30,31			
1/20/2012	Added new DE	CA-194, 195, 196, 197 and 198			
1/20/2012	Updated the XML	CA-162			
1/24/2012	Added new DE	CA-195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, and 206			
1/24/2012	Edited Parent's Name and XML	CA-158			
1/24/2012	Edited Long Name, Description and XML	CA-22.3			
1/24/2012	Edited Long Name and Description	CA-22.5 and 22.7			
3/22/2012	Changed Parent's Name from "FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/EPAGeneratedFuelEconomyCAFEDetails/EPAReformedStandardDetails" to "FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ReformedStandardDetails"	CA-199			
3/29/2012	Added New EPA Calculated Fields. Assigned data element numbers for existing EPA Calculated Fields.	CA-207, CA-208, CA-209, CA-210, CA-210.5, CA-211.5, CA-212			
4/12/2012	Added XML tag	CA-200, 201, 202, 204, 205, 206, 207			
4/12/2012	Added Parent's Name	CA-207			
4/12/2012	Updated Parent's name, XML tag	CA-22, 22.5, 22.7, 53, 54, 55, 91, 92, 93, 130, 131, 151, 152, 161, 162, 163, 200, 201, 202, 204, 205, 206			
4/12/2012	Updated Min value and Max value	CA-22.7, 202, 206			
4/12/2012	Updated data element number from CA-211 to CA-196 to match the database and added Parent's name and XML tag	CA-196			

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Date	Description	Data Element			
4/12/2012	Updated data element number from CA-211.5 to CA-197 to match the database and added Parent's name and XML tag	CA-197			
4/12/2012	Updated data element number from CA-212 to CA-198 to match the database and added Parent's name and XML tag	CA-198			
4/12/2012	Updated to change the Data Element Name	CA-10			
4/12/2012	Removed data elements	CA-11, 59, 60, 61, 63, 66, 67, 70, 71, 75, 76, 77, 79, 82, 83, 86, 87, 98, 99, 100, 101, 106, 107, 108, 113, 114, 115, 120, 121, 134, 135, 136, 137, 142, 143, 144, 145, 169, 170, 171, 172, 177, 178, 179, 184, 185, 186, 190, 191, 203			
4/12/2012	Assigned data element numbers to CA-207 - 222 to the EPA Calculated Baseline/Final Domestic/Import Passenger Vehicle CAFE SFITW/FEITW data elements as indicated in the database	CA-207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, and 222			
4/12/2012	Re-assigned data element numbers for CA-207, 208, 209, 210, and 210.5 to data element numbers 223, 224, 225, 226, and 226.5	CA-223, 224, 225, 226, 226.5			
4/17/2012	Removed data element	CA-14			
4/23/2012	Changed "GreenhouseGas" to "GHG" in Parent's name	CA-161, 162, 163			
4/23/2012	Changed "TemporaryLeadtimeAllowanceAlternativeStandard" to "GHGTLAAS" in Parent's name	CA-196, 197, 198			
4/23/2012	Changed "GreenhouseGas" to "GHG" in XML tag	CA-130, 151, 161, 162, 163, 196, 197, 198			
4/23/2012	Changed "TemporaryLeadtimeAllowanceAlternativeStandard" to "GHGTLAAS" in XML tag	CA-131, 152			
4/23/2012	Moved "CAFE" within XML tag	CA-53, 54, 55, 91, 92, 93			
6/1/2012	Updated Applicable Business Rules for Emergency Release 10.0.3	CA-34, CA-35			
9/18/2012	Changed Required to "FALSE"	CA-4.5			
10/1/2012	Added new data elements	CA-227, CA-228			
10/2/2012	Updated Applicable Business Rules	CA-0, CA-1, CA-4, CA-4.5, CA-227, CA-228			
10/17/2012	Added new data elements	CA-229, CA-230, CA-231, CA-232, CA-233, CA-234, CA-235, CA-236, CA-237			
2/1/2013	Updated Applicable Business Rules	CA-3, CA-14.5, CA-35, CA-39, CA-41, CA-227			
FE Label					
11/23/2010	Added Parent's name, XML tag	GL-78.2		N	
11/23/2010	Added Parent's name, XML tag	GL-79.1		N	
11/23/2010	Added Parent's name, XML tag	GL-79.2		N	
11/23/2010	Added Parent's name, XML tag; Added new allowed value "CS-3C = Charge Sustaining 3-cycle"	GL-79.3		N	
11/23/2010	Edited allowed values field	GL-123		N	
11/23/2010	Added "GL-130.5 continued" DE; Updated Validation rules	GL-130.5		N	
11/23/2010	Added Parent's name, XML tag	GL-173.1		N	
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
2/24/2011	Added NEW GL-130.2	GL-130.2		N	
4/13/2011	Updated multiplicity	GL-81			
4/13/2011	Changed Collection Type	GL-130			
4/13/2011	Changed Collection Type	GL-130.5			
4/15/2011	Updated enumeration list from KW-HR100 to KW-HR/100	GL-90			
4/28/2011	Updated the multiplicity	GL-81			
4/28/2011	Add 'HYD' as a new enumeration	GL-13.5.3			
4/28/2011	Hide the business rule text column	All DE's			
4/28/2011	Marked as Deleted	GL-7			
4/28/2011	Marked as Deleted	GL-8			

Date	Change	DE			Notes
4/28/2011	Marked as Deleted	GL-9			
12/16/2011	Updated enumeration list. Updated text for option 4, Deleted option 5	GL-106			
1/6/2012	Updated FE Label section with requirements added in VERIFY-11292 Excel attachment. Also edited the collection point for data requirements suggested in the Word attachment to this issue	All DE's			See https://wush.net/confluence/verify/display/GHGLDP2/Schema+changes+for+FE+Label for more details on XML Schema changes implemented.
1/19/2012	Updated multiple data requirements in the FE Label section with new Parent's Name, XML Tag, and Long Name	Multiple DE's			
1/19/2012	Removed the XML tag	GL-120.1, 120.2, 120.3, 120.4, 120.5, 120.6, 125.0.1, 125.0.2, 125.0.4, and 125.0.5			
1/19/2012	Re-added	GL-168, 169, 170 and 171			
1/26/2012	Updated all instances of "KW-HR100" or "KW-HR/100MILES" to KW-HR/100Miles	GL-85, 90, 100, 101 and 102			
2/3/2012	Updated data requirements only to change "Value" to "Number" in the XML tag	GL-219, 220, and 221			
2/3/2012	Updated data requirements only to change update the Parent's Name appropriately	GL-92			
2/3/2012	Updated data requirements only to add "Only" to the XML tag	GL-200			
2/3/2012	Added Parent's name, XML tag	GL-204			
2/3/2012	Updated Long name	GL-236			
2/6/2012	Changed "MPG" to "FE" in the Long Name	GL-85, 100, 101, and 102			
2/6/2012	Changed "MPG" to "FuelEconomy" in the XML tag	GL-85			
2/6/2012	Changed "CarbonDioxide4Number" to "CarbonDioxideNumber" in the XML tags.	GL-235, 236, 201, 240, 241, and 242			
2/6/2012	Changed data element number for "Fuel Cost Model Year" from "GL-176" to "GL-175.1" to resolve a data element conflict with "Release Date"	GL-175.1			
3/27/2012	Removed XML Tag and Parent's Name	GL-240, 241, 242, 215, 222, 237, 238, 239, 113.5, 113.6, 113.7, 116.5, 116.6, 116.7, 249, 250, 251, 252, 253, 254			
3/29/2012	Added New EPA Calculated Fields	GL-277, GL-278			
4/24/2012	Updated Long Name to "Stop/Start Indicator". Removed enumeration value 'L' (Yes, but with lock-out features)	GL-75			
6/1/2012	Updated Applicable Business Rules for Emergency Release 10.0.3	GL-13.5, GL-126, GL-207, GL-214			
8/2/2012	Added New Fields	GL-279, 280			
8/2/2012	Added Parent's Name and XML tag	GL-215, 222			
10/1/2012	Added new data element	GL-281			
2/12/2013	Updated Applicable Business Rules	GL-79			
7/15/2013	Corrected data element name	GL-73			
9/26/2014	Renamed data element to "Litmus Bypass Indicator"	GL-200			
Road Load					
11/23/2010	Added Parent's name	RL-1		N	
11/23/2010	Added Parent's name, XML tag	RL-1.5		N	
11/23/2010	Added Parent's name, XML tag	RL-1.6		N	
11/23/2010	Added Parent's name, XML tag	RL-2		N	
11/23/2010	Added Parent's name	RL-3		N	
11/23/2010	Added Parent's name	RL-4		N	
11/23/2010	Added Parent's name	RL-5		N	
11/23/2010	Added Parent's name, XML tag	RL-5.1		N	
11/23/2010	Added Parent's name, XML tag	RL-6		N	
11/23/2010	Added Parent's name; Changed max value from 100 to 99.999	RL-7		N	
11/23/2010	Changed collection type from "assigned" to "Pre-existing"	RL-14		N	
11/23/2010	Added Parent's name	RL-15		N	
11/23/2010	Added Parent's name	RL-16		N	
11/23/2010	Added Parent's name, XML tag	RL-17		N	
11/23/2010	Added Parent's name, XML tag	RL-18		N	
11/23/2010	Added Parent's name	RL-19		N	

Date	Change	DE		Status	Notes
11/23/2010	Added Parent's name	RL-20		N	
11/23/2010	Added Parent's name	RL-21		N	
11/23/2010	Added Parent's name	RL-22		N	
11/23/2010	Added Parent's name	RL-24		N	
11/23/2010	Added Parent's name	RL-25		N	
11/23/2010	Added Parent's name	RL-26		N	
11/23/2010	Added Parent's name, XML tag	RL-27		N	
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			
1/19/2012	new Description, Parent's Name and XML Tag information	Multiple DE's			
1/19/2012	updated the Originator, Collection Point, and Collection Type	RL-7			
1/19/2012	Added DE's	RL-0.5, 1, 1.7, 1.8, 2.1, 2.2 and 28			
1/19/2012	Removed DE	RL-3.5			
5/4/2012	Changed "RoadLoadHorsepowerValue" to "TotalRoadLoadHorsepowerValue"	RL-22			
2/25/2013	Updated Description	RL-9, RL-9.1, RL-10, RL-10.1			
2/25/2013	Changed Parent's Name and XML Tag to "NA"	RL-8, RL-9, RL-9.1, RL-10, RL-10.1, RL-11, RL-12, RL-13, RL-14			
2/25/2013	Corrected Basic Data Type, Data Type Description, and Max Length	RL-10.1			
Vehicle Information					
12/21/2010	Changed Min Value from 0.1 to 0.0	VI-43.5		N	
12/22/2010	Updated the first Validation Rule with new text	VI-11.6		N	
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
3/30/2011	Updated description to remove the selection of invalid value of 'NA'	VI-15			
4/18/2011	Fixed enum values (S/T)	VI-11.2 VI-11.3			
4/28/2011	Added new enumeration: 'HYD'	VI-11.1			
4/28/2011	Hide the business rule text column	All DE's			
8/19/2011	Updated status of all applicable data elements from TBD to changes due to new technologies	All DE's			
8/19/2011	Added strike through text on the word New in the BR section	VI-10			
8/24/2011	Added BR LD-CTD-VI-BE001	VI-10.6			
6/29/2012	Updated Applicable Business Rules for Maintenance Release 10.1.0	VI-40.5, VI-41, VI-42, VI-43, VI-44, VI-45, VI-46			
9/26/2014	Added new data elements	VI-6.5, VI-6.6			
9/26/2014	Updated Applicable Business Rules for Release Flamingo	VI-40.5, VI-41, VI-42, VI-43, VI-44, VI-45, VI-46			
Test Information					
12/21/2010	Modified Notes/Questions to add mapping for Test Procedures Codes 84, 85, 86 Replaced the validations rules with the new rule	TI-43		N	
12/21/2010	Added new note re: Test Procedure Codes 80, 82	TI-8		N	
12/21/2010	Updated the first Validation Rule with new text	TI-40		N	
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
2/9/2011	Added new enumeration value "AS-VOLT"	TI-19		N	
2/10/2011	Changed DE number due to duplication	TI-18.5		N	This DE number was duplicated so EPA requested the new DE "Charge Depleting Range (Calculated miles)" be changed to TI-18.6.1
2/21/2011	Added new DE for Opt-CREE	TI-19.5.1			Created separate DE's for CREE and Opt-CREE Updated BR - need to confirm text is correct
2/21/2011	Updated existing DE	TI-19.5			Removed Opt-CREE portion
2/24/2011	Updated BR text as it is in VERIFY-3326	TI-19			
2/24/2011	Changed the DE number from TI-19.5.1 to TI-19.6 as it is listed in schema; Added XML tag and Parent Name	TI-19.6		Y	
2/24/2011	Updated Parent Name	TI-20.6			
3/30/2011	Added the Data Type Description as 'Enumeration'	TI-20.5			

Date	Change	TI			
4/13/2011	Added new BR for TI-19	TI-19			
4/13/2011	Added new enumeration value "NOT5C"	TI-45			
4/15/2011	Updated enumeration list from KW-HR100 to KW-HR/100	TI-20.5			
4/28/2011	Hide the business rule text column	All DE's			
6/21/2011	Deleted the Data Element "Verify-Calculated Opt-CREE"	TI-68			
6/21/2011	Deleted the Data Element "Verify-Calculated CREE"	TI-67			
6/22/2011	Added new data elements	TI-69, TI-70, TI-71, TI-72, TI-73, TI-74, TI-75 and TI-76			
8/19/2011	Changed allowed values from "Not Test 5-Cycle Category" to "Not Test 5-Cycle"	TI-45			
8/19/2011	Changed status from "TBD" to "Label/CAFE/GHG Changes"	TI 20.5 and TI 20.6			
8/19/2011	Changed status from "TBD" to Changes Due To New Technologies (Multi Fuels, PHEV).	TI 18.1 through 18.7			
8/22/2011	the following portion in the description: "Note the list of test result names includes possible fuel economy test results also. CREE and Opt-CREE are not allowable values at the test level; these will be calculated by Verify for EPA confirmatory tests and when tests are used in a Test Group. " and replaced it with the following: "'CREE' or 'OPT-CREE' values are required in the Charge Depleting Bag / Phase #1 section. Otherwise, they are optional."	TI-19			
8/24/2011	Changed the required fields to false and the description to "without deterioration factors applied."	TI-19.1 through TI-19.8			
8/24/2011	Added BR LD-CTD-TI-BE001	TI-39			
8/24/2011	Added BR's LD-CTD-TI-BE003 and LD-CTD-TI-BE002	TI-40			
8/24/2011	Removed note because the new BR was added	TI-22			
1/24/2012	Updated the description	TI-19			
4/12/2012	Updated to change the Data Element Name from "Vehicle Configuration #" to "Vehicle Configuration Number"	TI-5			
6/1/2012	Updated Applicable Business Rules for Emergency Release 10.0.3	TI-0.5, TI-1, TI-19.4			
8/21/2012	Updated Applicable Business Rules for Maintenance Release 10.2.0	TI-43			
9/27/2012	Added new enumeration values "Hot 1435 LA92" and "US06 Bag 2 Only"	TI-8			
9/27/2012	Added new enumeration value "CARB LEV3 E10 REGULAR GASOLINE"	TI-9			
9/27/2012	Added new enumeration values "NMOG+NOX" and "NMOG+NOX-COMP"	TI-19			
11/1/2012	Added new enumeration value "CARB LEV3 E10 PREMIUM GASOLINE"	TI-9			
4/4/2013	Added new enumeration value "CARB CERT DIESEL 7-15 PPM SULFUR" and revised enumeration value for 19 to "FEDERAL CERT DIESEL 7-15 PPM SULFUR"	TI-9			
4/4/2013	Added enumeration values "DT-IWRR (Drive Trace Inertia Work Ratio Rating)," "DT-ASCR (Drive Trace Absolute Speed Change Rating)," and "DT-EER (Drive Trace Energy Economy Rating)"	TI-19			
4/4/2013	Revised Min Value to accommodate new Drive Trace test result/emission names	TI-20			
4/4/2013	Updated Applicable Business Rules for Release Badger	TI-4, TI-5, TI-9, TI-13.5, TI-18.5, TI-19, TI-20, TI-45			
9/26/2014	Added new enumeration values "HWY80 (80 MPH HIGHWAY TEST)," " AC17 - MANUAL A/C CONTROLS," "AC17 - AUTOMATIC A/C CONTROLS," "EVAP CARB FUEL ONLY (RIG) TEST," "EVAP CANISTER BLEED TEST," "LEAK TEST - EVAP FUEL SYSTEM OBD," "LEAK TEST - PORT NEAR CANISTER," "LEAK TEST - PORT NEAR FUEL PIPE," and "LEAK TEST - EVAP GAS CAP"	TI-8			

9/26/2014	Added new enumeration values "COLD CO E10 REGULAR GASOLINE (TIER 3)," "COLD CO E10 PREMIUM GASOLINE (TIER 3)," "COLD CO DIESEL 7-15 PPM SULFUR," "TIER 3 E10 REGULAR GASOLINE (9 RVP@LOW ALT.)," "TIER 3 E10 PREMIUM GASOLINE (9 RVP@LOW ALT.)," "TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR ONLY)," and "TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR ONLY)"	TI-9			
9/26/2014	Added new data elements	TI-24.5, TI-24.6, TI-24.8			
9/26/2014	Added new enumeration values "HC-TOTAL-EQUIV," "METHANE-COMB," "N2O-COMB," "LEAK-DIA," and "LEAK-GAS CAP"	TI-19			
9/26/2014	Deleted enumeration values "URBRNG" and "HWYRNG"; added new enumeration values "EVAP-COMP" and "EVAP-LEAK"; updated test procedures for test categories	TI-43			
9/26/2014	Updated test fuels for test fuel categories	TI-44			
9/26/2014	Updated Applicable Business Rules for Release Flamingo	TI-9, TI-19, TI-24.5, TI-45			
Test Group					
12/21/2010	Updated Collection Type column as 'Pre-existing Data'	TG-203		N	
12/21/2010	Updated Multiplicity column	TG-7.4		N	
12/21/2010	Updated Multiplicity column	TG-7.4.1		N	
12/21/2010	Updated Multiplicity column	TG-7.5		N	
12/21/2010	Updated Multiplicity column	TG-218		N	
12/21/2010	Updated Multiplicity column	TG-219		N	
12/21/2010	Updated Multiplicity column	TG-219.1		N	
12/21/2010	Updated Multiplicity column	TG-219.2		N	
12/21/2010	Updated Multiplicity column	TG-8.4		N	
12/21/2010	Updated Multiplicity column	TG-8.5		N	
12/21/2010	Updated Multiplicity column	TG-8.6		N	
12/21/2010	Updated Multiplicity column	TG-219.3.1		N	
12/21/2010	Updated Multiplicity column	TG-219.4.1		N	
12/21/2010	Updated Multiplicity column	TG-219.4.2		N	
1/27/2011	Updated validation rule	TG-7.7		N	New Text: If Drive Source (TG-7.1) equals 'C' (Combustion Engine) and if more than one Fuel(s) (TG-7.3) selected is combustible (i.e., "Gasoline" (G), "Diesel" (D), "Methanol" (M), "Ethanol" (E), "Compressed Natural Gas" (CNG), "Liquified Natural Gas" (LNG), or "Liquified Petroleum Gas" (LPG)), and optional for "Hydrogen" (H), then Multiple Fuel Combustion - Separate or Together (TG-7.7) is required. Otherwise, it is not allowed.
1/27/2011	Updated validation rule	TG-7.5		N	New Text: If more than one Fuel(s) (TG-7.3) is selected for the Test Group when Drive Source (TG-7.1) is 'C' (Combustion Engine), and if model year is greater than or equal to 2012, then CREE Weighting Factor for Dual/Multiple Fuel Vehicles (TG-7.5) is required for each fuel. Otherwise, it is not allowed.
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
2/9/2011	Added new data element	TG-217.1			
2/9/2011	Added new enumeration value "AS-VOLT"	TG-225			
2/21/2011	Created new DE for Opt-CREE	TG-8.4.1			
2/21/2011	Updated DE	TG-8.4			Removed Opt-CREE
2/23/2011	Created new DE for Opt-CREE	TG-8.5.1			

Date	Change	DE			Notes	
2/23/2011	Updated DE	TG-8.5			Removed Opt-CREE	
2/23/2011	Created new DE for Opt-CREE	TG-8.6.1				
2/23/2011	Updated DE	TG-8.6			Removed Opt-CREE	
2/24/2011	Updated Required Field to FALSE	TG-216.7				
2/24/2011	Updated Required Field to FALSE	TG-32.5				
2/24/2011	Updated Required Field to FALSE	TG-32.6				
2/24/2011	Updated XML Tag	TG-8.4				
2/24/2011	Added new XML Tag and Parent Name	TG-8.4.1				
2/24/2011	Updated XML Tag and Parent Name	TG-8.5				
2/24/2011	Updated XML Tag and Parent Name	TG-8.6				
2/24/2011	Added new XML Tag and Parent Name	TG-8.5.1				
2/24/2011	Added new XML Tag and Parent Name	TG-8.6.1				
2/28/2011	Updated the Enumeration List, Applicable Business Rules, and English Validation Rules column	TG-209				
2/28/2011	Updated the Enumeration List, Applicable Business Rules, and English Validation Rules column	TG-225				
3/3/2011	Added new business rules created based on the Group business rules	Many DE's				
3/30/2011	Corrected the XML tag	TG-7.9				
3/30/2011	Added the Allowed Values (same as TG-204)	TG-217.1				
3/30/2011	Corrected the Allowed Value to remove 'COLD' as a valid option	TG-203				
4/7/2011	Changed basic data type from A(3) to A(1) as discussed in VERIFY-7209	TG-7.4.1				
4/15/2011	Updated Applicable BRs	All DE's				
4/18/2011	Fixed enum values (S/T)	TG-7.6 TG 7.7				
4/28/2011	Added new enumeration: 'HYD'	TG-7.3				
4/28/2011	Hide the business rule text column	All DE's				
6/21/2011	Deleted BR LD-CERT-TG-BR111	Z-16				
6/21/2011	Deleted the Data Element "CREE Weighting Factor for Dual/Multiple Fuel Vehicles"	TG-16				
6/21/2011	Deleted the Data Element "Manufacturer-calculated Combined Test Group CREE Certification Level (Per Test Group Fuel)"	TG-179				
6/21/2011	Deleted the Data Element "Manufacturer-calculated Combined Test Group Opt-CREE Certification Level (Per Test Group Fuel)	TG-180				
6/21/2011	Deleted the Data Element "Verify-calculated Combined Test Group CREE Certification Level (Per Test Group Fuel)"	TG-181				
6/21/2011	Deleted the Data Element "Verify-calculated Combined Test Group Opt-CREE Certification Level (Per Test Group Fuel)"	TG-182				
6/21/2011	Deleted the Data Element "Discrepancy between Verify and Manufacturer-calculated Combined Test Group CREE (Per Test Group Fuel)."	TG-183				
6/21/2011	Deleted the Data Element "Discrepancy between Verify and Manufacturer-calculated Combined Test Group Opt-CREE (Per Test Group Fuel)."	TG-184				
8/22/2011	Updated status from TBD to appropriate status	TG 7.1-7.8, 8.3, 32.5-32.6, 216.7, 219.1-219.2, and 8.4-8.6.1				
8/22/2011	Reopened Data Element "CREE Weighting Factor for Dual/Multiple Fuel Vehicles"	TG-7.5				
8/22/2011	Deleted note; it is no longer valid	TG-209				
8/22/2011	Removed the following text from the description: "per 40 CFR 86.1801-12. (j) SBA exemption, (k) conditional exemption,"	TG-216.7				
8/24/2011	Added two new DE	TG-219.3 and TG-219.4				
9/12/2011	Added the following text to TG-212: For Test Result/Emission Names equal to "CREE" or "OPT-CREE", enter a value of "999.9999" for the Emission Standard Value.	TG-212				
9/16/2011	Added new business rule	TG-217				
9/16/2011	Added new business rule	TG-218				

Date	Change	TG			
9/16/2011	Added new business rule	TG-219			
9/16/2011	Added new business rule	TG-219.1			
9/16/2011	Added new business rule	TG-219.2			
9/16/2011	Added new business rule	TG-219.3			
9/16/2011	Added new business rule	TG-219.4			
12/16/2011	Added T1 to enumeration list	TG-201			
1/13/2012	Changed "MFR FE" to "RAFE" in the description	TG-219.3.1, TG-219.3.2, 219.4.1 and TG219.4.2			
1/24/2012	Edited allowed values field	TG-16			
1/24/2012	Added new DE	TG-6.5			
3/29/2012	Updated Enumeration	TG-201, TG-209			
8/17/2012	Changed Basic Data Type from N(4,2) to N(6,2) and updated Max Value and Total Digits accordingly	TG-83			
9/27/2012	Added new enumeration values "HOT 1435 LA92" and "US06 BAG 2 ONLY"	TG-204.5, TG-223.5			
9/27/2012	Added new enumeration values "NMOG+NOX" and "NMOG+NOX-COMP"	TG-209, TG-225			
10/4/2012	Revised M6 and M7 vehicle class enumerations	TG-16, TG-205			
10/4/2012	Revised existing and added new California exhaust standard enumeration values	TG-201			
10/4/2012	Revised existing and added new California evaporative standard enumeration values	TG-224			
11/1/2012	Removed enumeration values "L2SULEV170" and "L2SULEV230"	TG-201			
4/9/2013	Updated Applicable Business Rules for Release Badger.	TG-209, TG-225			
9/26/2014	Added new enumeration values "T3B160", "T3B125", "T3B110", "T3B85", "T3SULEV3", "T3B70", "T3B50", "T3B30", "T3B20", "T3B0", "HDV2B395", "HDV2B340", "HDV2B250", "HDV2B170", "HDV2B150", "HDV2B0", "HDV3B630", "HDV3B570", "HDV3B400", "HDVB270", "HDV3B230", "HDV3B200", and "HDV3B0"	TG-201			
9/26/2014	Added new enumeration values "HWY80 (80 MPH HIGHWAY TEST)," " AC17 - MANUAL A/C CONTROLS," "AC17 - AUTOMATIC A/C CONTROLS," "EVAP CARB FUEL ONLY (RIG) TEST," "EVAP CANISTER BLEED TEST," "LEAK TEST - EVAP FUEL SYSTEM OBD," "LEAK TEST - PORT NEAR CANISTER," "LEAK TEST - PORT NEAR FUEL PIPE," and "LEAK TEST - EVAP GAS CAP"	TG-204.5, TG-223.5			
9/26/2014	Added new enumeration values "HC-TOTAL-EQUIV," "METHANE-COMB," "N2O-COMB," "LEAK-DIA," and "LEAK-GAS CAP"	TG-209, TG-225			
9/26/2014	Updated Basic Data Type	TG-207			
9/26/2014	Added new enumeration values "T3" and "T3-3Z"	TG-224			
9/26/2014	Renamed data element to "SFTP Federal Compliance Identifier"; changed enumeration list to "TIER2," "TIER3," and "NA"; changed XML tag to FederalComplianceIdentifier	TG-216.8			
9/26/2014	Renamed data element to "SFTP Tier 2 Composite CO Option"	TG-216.9			
9/26/2014	Renamed data element to "HC-NM+NOX-COMP - Tier 2"	TG-219.5			
9/26/2014	Renamed data element to "CO-COMP - Tier 2/Tier 3"	TG-219.6			
9/26/2014	Renamed data element to "PM-COMP - Tier 2"	TG-219.7			
9/26/2014	Deleted enumeration values "URBRNG" and "HWYRNG"; added new enumeration values "EVAP-COMP" and "EVAP-LEAK"; updated test procedures for test categories	TG-203			
9/26/2014	Added new data elements	TG-255, TG-256, TG-257, TG-261, TG-262, TG-263, TG-264, TG-265			
9/26/2014	Updated Applicable Business Rules for Release Flamingo	TG-7.3, TG-200.5, TG-201, TG-202.5, TG-209, TG-210, TG-217, TG-218, TG-219, TG-224, TG-262, TG-263, TG-264, TG-265,			

Footprint					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			
6/9/2011	Changed Data Element name to "Manufacturer Footprint Target GHG Value Rounded to One Decimal Place (grams per mile)" from "… Two Decimal Places…" per EPA Meeting 06/02/2011	FT 20			
7/14/2011	Added new Data Element FT-0.7 Submitter Manufacturer Code	FT-0.7			
7/14/2011	Changed the XML Tag from EPAManufacturerCode to CarlineManufacturerCode for FT-1	FT-1			
9/13/2011	Changed Min Value from 0.1 to 0.0, Required to FALSE & Added new business rules	FT-16 and FT-17			
9/16/2011	Added new business rule	FT-5			
9/30/2011	Updated XML tags	FT-13, 14, 15, 16, 17, 18			
8/21/2012	Updated Applicable Business Rules for Maintenance Release 10.2.0	FT-0.7			
6/20/2013	Added new data element FT-37 Footprint Vehicle Type	FT-37			
Decision Information					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
3/30/2011	Corrected the XML tag	DI-25.1			
4/28/2011	Hide the business rule text column	All DE's			
12/16/2011	Added T1 to enumeration list	DI-9			
1/19/2012	Added XML tag	DI-25.15			
3/29/2012	Updated Enumeration	DI-9, DI-10			
6/29/2012	Updated Applicable Business Rules for Maintenance Release 10.1.0	DI-1, DI-3, DI-4, DI-5			
9/27/2012	Added new enumeration values "HOT 1435 LA92" and "US06 BAG 2 ONLY"	DI-18, DI-38			
9/27/2012	Added new enumeration value "CARB LEV3 E10 REGULAR GASOLINE"	DI-19, DI-38.5			
10/4/2012	Revised existing Bin enumeration values	DI-9			
10/4/2012	Revised existing and added new California exhaust standard enumeration values	DI-10			
10/4/2012	Revised existing and added new California evaporative standard enumeration values	DI-12			
11/1/2012	Added new enumeration value "CARB LEV3 E10 PREMIUM GASOLINE"	DI-19, DI-38.5			
11/1/2012	Removed enumeration values "L2SULEV170" and "L2SULEV230"	DI-10			
4/4/2013	Added new enumeration value "CARB CERT DIESEL 7-15 PPM SULFUR" and revised enumeration value for 19 to "FEDERAL CERT DIESEL 7-15 PPM SULFUR"	DI-19, DI-38.5			
9/26/2014	Added new enumeration values "T3B160", "T3B125", "T3B110", "T3B85", "T3SULEV3", "T3B70", "T3B50", "T3B30", "T3B20", "T3B0", "HDV2B395", "HDV2B340", "HDV2B250", "HDV2B170", "HDV2B150", "HDV2B0", "HDV3B630", "HDV3B570", "HDV3B400", "HDVB270", "HDV3B230", "HDV3B200", and "HDV3B0"	DI-9			
9/26/2014	Added new enumeration values "T3" and "T3-3Z"	DI-11			
9/26/2014	Added new enumeration values "HWY80 (80 MPH HIGHWAY TEST)," " AC17 - MANUAL A/C CONTROLS," "AC17 - AUTOMATIC A/C CONTROLS," "EVAP CARB FUEL ONLY (RIG) TEST," "EVAP CANISTER BLEED TEST," "LEAK TEST - EVAP FUEL SYSTEM OBD," "LEAK TEST - PORT NEAR CANISTER," "LEAK TEST - PORT NEAR FUEL PIPE," and "LEAK TEST - EVAP GAS CAP"	DI-18, DI-38			

Date	Change	DE
9/26/2014	Added new enumeration values "COLD CO E10 REGULAR GASOLINE (TIER 3)," "COLD CO E10 PREMIUM GASOLINE (TIER 3)", "COLD CO DIESEL 7-15 PPM SULFUR," "TIER 3 E10 REGULAR GASOLINE (9 RVP@LOW ALT.)," "TIER 3 E10 PREMIUM GASOLINE (9 RVP@LOW ALT.)," "TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR ONLY)," "TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR ONLY)"	DI-19, DI-38.5
9/26/2014	Added new data element	DI-38.8
9/26/2014	Updated Applicable Business Rules for Release Flamingo	DI-9, DI-11, DI-38.5
Shift Schedule		
2/9/2011	Updated all BR numbers with applicable JIRA numbers	
4/28/2011	Hide the business rule text column	All DE's
9/26/2014	Added new enumeration values "HWY80" and "LA92"; removed enumeration values "LA4 (prep only)", "LA4", "505", "HWFE (no warmup)", "SCC#1", "SCC#2", "BIH (Auto)", "BIH (Manual)", "3BagHWFE", "3Bag505", and "LA4 (perturbed 1.5)"	SS-56
Supplemental Information		
2/9/2011	Updated all BR numbers with applicable JIRA numbers	
2/9/2011	Added new enumeration value "AS-VOLT"	SI-59
2/28/2011	Updated English Validation Rule based on JIRA	SI-59
4/28/2011	Hide the business rule text column	All DE's
12/16/2011	Added T1 to enumeration list	SI-57A
3/29/2012	Updated Enumeration	SI-91, SI-57A, SI-71
6/29/2012	Updated Applicable Business Rules for Maintenance Release 10.1.0	SI-1, SI-2, SI-3, SI-3.5, SI-26, SI-27, SI-41.5
9/27/2012	Added new enumeration values "HOT 1435 LA92" and "US06 BAG 2 ONLY"	SI-41.5, SI-92, SI-98
9/27/2012	Added new enumeration values "NMOG+NOX" and "NMOG+NOX-COMP"	SI-59, SI-71
10/4/2012	Revised M6 and M7 vehicle class enumerations	SI-91
10/4/2012	Revised existing and added new California exhaust standard enumeration values	SI-57A
10/4/2012	Revised existing and added new California evaporative standard enumeration values	SI-57B
11/1/2012	Removed enumeration values "L2SULEV170" and "L2SULEV230"	SI-57A
4/9/2013	Updated Applicable Business Rules for Release Badger.	SI-59, SI-71
9/26/2014	Added new enumeration values "HWY80 (80 MPH HIGHWAY TEST)," " AC17 - MANUAL A/C CONTROLS," "AC17 - AUTOMATIC A/C CONTROLS," "EVAP CARB FUEL ONLY (RIG) TEST," "EVAP CANISTER BLEED TEST," "LEAK TEST - EVAP FUEL SYSTEM OBD," "LEAK TEST - PORT NEAR CANISTER," "LEAK TEST - PORT NEAR FUEL PIPE," and "LEAK TEST - EVAP GAS CAP"	SI-41.5, SI-92, SI-98
9/26/2014	Added new enumeration value "Road Speed Fan (width 31.5" x height 24")"; Revised "9" enumeration value.	SI-42
9/26/2014	Added new data elements	SI-44.5, SI-49.5, SI-49.7
9/26/2014	Added new enumeration values "T3B160", "T3B125", "T3B110", "T3B85", "T3SULEV3", "T3B70", "T3B50", "T3B30", "T3B20", "T3B0", "HDV2B395", "HDV2B340", "HDV2B250", "HDV2B170", "HDV2B150", "HDV2B0", "HDV3B630", "HDV3B570", "HDV3B400", "HDVB270", "HDV3B230", "HDV3B200", and "HDV3B0"	SI-57A
9/26/2014	Added new enumeration values "HC-TOTAL-EQUIV," "METHANE-COMB," "N2O-COMB," "LEAK-DIA," and "LEAK-GAS CAP"	SI-59, SI-71
9/26/2014	Updated Basic Data Type	SI-58.6
9/26/2014	Added new enumeration values "T3" and "T3-3Z"	SI-57B
9/26/2014	Updated Applicable Business Rules for Release Flamingo	SI-44.5, SI-57A, SI-57B

Carline					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			
9/16/2011	Added new enumerations values and new business rules.	CL-5			
9/30/2011	Updated the annotation for the enumeration values and added new business rule.	CL-5			
2/21/2013	Corrected Basic Data Type and Max Length	CL-6			
6/11/2013	Updated Applicable Business Rules for Release Cougar.	CL-5			
Evaporative Family					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
3/30/2011	Corrected the XML tag	EV-3			
4/18/2011	Fixed enum values (S/T)	EV-3.6			
4/28/2011	Added new enumeration: 'HYD'	EV-3.5			
4/28/2011	Hide the business rule text column	All DE's			
9/26/2014	Added new data elements	EV-20, EV-21, EV-22, EV-23, EV-24, EV-25, EV-26, EV-27, EV-28, EV-29, EV-30, EV-31, EV-32			
Certificate Request					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			
1/24/2012	Updaed the description	CR-10 and CR-22			
4/19/2012	Changed "Revised Certificate?" to "New Certificate Needed"	CR-21			
6/28/2013	Updated Applicable Business Rules for Release Cougar.	CR-4, CR-9, CR-10, CR-11, CR-12, CR-14, CR-15, CR-16			
9/26/2014	Updated description	CR-10			
IUVP Test Information					
12/10/2013	Added enumeration value COMB-CREE and COMB-OPT-CREE	IT-28			
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
2/9/2011	Added new enumeration value "AS-VOLT"	IT-28			
4/28/2011	Hide the business rule text column	All DE's			
12/16/2011	Added new enumerations	IT-30			
5/3/2012	Updated to Add BR026 and deleted Enumerations	IT-28			
9/27/2012	Added new enumeration values "HOT 1435 LA92" and "US06 BAG 2 ONLY"	IT-14			
9/27/2012	Added new enumeration value "CARB LEV3 E10 REGULAR GASOLINE"	IT-15			
9/27/2012	Added new enumeration values "NMOG+NOX" and "NMOG+NOX-COMP"	IT-28			
11/1/2012	Added new enumeration value "CARB LEV3 E10 PREMIUM GASOLINE"	IT-15			
4/4/2013	Added new enumeration value "CARB CERT DIESEL 7-15 PPM SULFUR" and revised enumeration value for 19 to "FEDERAL CERT DIESEL 7-15 PPM SULFUR"	IT-15			
4/4/2013	Added new enumeration values "DT-IWRR (Drive Trace Inertia Work Ratio Rating)," "DT-ASCR (Drive Trace Absolute Speed Change Rating)," and "DT-EER (Drive Trace Energy Economy Rating)"	IT-28			
4/4/2013	Revised Min Value to accommodate new Drive Trace test result/emission names	IT-29			
4/29/2013	Added new enumeration value "N/A"	IT-30			
4/29/2013	Updated Applicable Business Rules for Release Badger.	IT-28, IT-29, IT-30			
IUVP Vehicle Information					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			
Fuel Properties					
9/27/2012	Added new enumeration value "CARB LEV3 E10 REGULAR GASOLINE"	FP-4			
11/1/2012	Added new enumeration value "CARB LEV3 E10 PREMIUM GASOLINE"	FP-4			

4/4/2013	Added new enumeration value "CARB CERT DIESEL 7-15 PPM SULFUR" and revised enumeration value for 19 to "FEDERAL CERT DIESEL 7-15 PPM SULFUR"	FP-4			
9/26/2014	Added new enumeration values "COLD CO E10 REGULAR GASOLINE (TIER 3)," "COLD CO E10 PREMIUM GASOLINE (TIER 3)", "COLD CO DIESEL 7-15 PPM SULFUR," "TIER 3 E10 REGULAR GASOLINE (9 RVP@LOW ALT.)," "TIER 3 E10 PREMIUM GASOLINE (9 RVP@LOW ALT.)," "TIER 3 E10 REGULAR GASOLINE (10 RVP-FFV ORVR ONLY)," "TIER 3 E10 PREMIUM GASOLINE (10 RVP-FFV ORVR ONLY)"	FP-4			
9/26/2014	Updated Applicable Business Rules for Release Flamingo	FP-4			

Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	CAFÉ	CA-127	GHG Exempt Indicator	New Data Element
11/23/2010	CAFÉ	CA-128	GHG Calculation Method	New Data Element
11/23/2010	CAFÉ	CA-129	For OCREE calculations, should N2O emissions always default to .010gpm?	New Data Element
11/23/2010	CAFÉ	CA-130	EPA Calculated Official Model Year GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-131	EPA Calculated Official Model Year GHG TLAAS Production Units	New Data Element
11/23/2010	CAFÉ	CA-132	Manufacturer Calculated Official Model Year GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-133	Manufacturer Calculated Official Model Year GHG TLAAS Production Units	New Data Element
11/23/2010	CAFÉ	CA-134	EPA Calculated Baseline Average GHG Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-135	EPA Calculated Baseline Average GHG TLAAS Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-136	EPA Calculated Baseline Average GHG Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-137	EPA Calculated Baseline Average GHG TLAAS Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-138	Manufacturer Calculated Baseline Average GHG Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-139	Manufacturer Calculated Baseline Average GHG TLAAS Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-140	Manufacturer Calculated Baseline Average GHG Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-141	Manufacturer Calculated Baseline Average GHG TLAAS Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-142	EPA Calculated Final Average GHG Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-143	EPA Calculated Final Average GHG TLAAS Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-144	EPA Calculated Final Average GHG Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-145	EPA Calculated Final Average GHG TLAAS Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-146	Manufacturer Calculated Final Average GHG Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-147	Manufacturer Calculated Final Average GHG TLAAS Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-148	Manufacturer Calculated Final Average GHG Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-149	Manufacturer Calculated Final Average GHG TLAAS Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-150	Manufacturer Calculated Final Truck CAFE Rounded 1 Decimal	New Data Element
11/23/2010	CAFÉ	CA-151	EPA Official Average GHG Grams Per Mile	New Data Element
11/23/2010	CAFÉ	CA-152	EPA Official Average GHG TLAAS Grams Per Mile	New Data Element
11/23/2010	CAFÉ	CA-153	Manufacturer Calculated Official Average GHG Grams Per Mile	New Data Element
11/23/2010	CAFÉ	CA-154	Manufacturer Calculated Official Average GHG TLAAS Grams Per Mile	New Data Element
11/23/2010	CAFÉ	CA-155	CAFE Domestic/Import Indicator	New Data Element
11/23/2010	CAFÉ	CA-156	GHG TLAAS Indicator	New Data Element
11/23/2010	CAFÉ	CA-157	GHG Advanced Technology Indicator	New Data Element
11/23/2010	CAFÉ	CA-158	Footprint Final Model Year GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-159	EPA Calculated Footprint Target GHG Value (grams per mile)	New Data Element
11/23/2010	CAFÉ	CA-160	Manufacturer Calculated Unrounded GHG Standard	New Data Element
11/23/2010	CAFÉ	CA-161	EPA Calculated Unrounded GHG Standard	New Data Element

Verify Light-Duty Data Requirements

Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	CAFÉ	CA-162	EPA Calculated Unrounded GHG Standard Discrepancy Value	New Data Element
11/23/2010	CAFÉ	CA-163	EPA Calculated Final GHG Standard	New Data Element
11/23/2010	CAFÉ	CA-164	Manufacturer GHG Comments	New Data Element
11/23/2010	CAFÉ	CA-165	EPA Calculated Baseline Model Type City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-166	EPA Calculated Baseline Model Type Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-167	EPA Calculated Baseline Model Type Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-168	EPA Calculated Baseline Model Type Combined GHG Value Whole Number	New Data Element
11/23/2010	CAFÉ	CA-169	EPA Calculated Final Model Type City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-170	EPA Calculated Final Model Type Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-171	EPA Calculated Final Model Type Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-172	EPA Calculated Final Model Type Combined GHG Value Whole Number	New Data Element
11/23/2010	CAFÉ	CA-173	EPA Calculated Model Type GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-174	EPA Calculated Baseline Base Level City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-175	EPA Calculated Baseline Base Level Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-176	EPA Calculated Baseline Base Level Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-177	EPA Calculated Final Base Level City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-178	EPA Calculated Final Base Level Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-179	EPA Calculated Final Base Level Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-180	EPA Calculated Base Level GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-181	EPA Calculated Baseline Configuration City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-182	EPA Calculated Baseline Configuration Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-183	EPA Calculated Baseline Configuration Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-184	EPA Calculated Final Configuration City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-185	EPA Calculated Final Configuration Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-186	EPA Calculated Final Configuration Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-187	EPA Calculated Configuration GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-188	EPA Calculated Baseline Subconfiguration City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-189	EPA Calculated Baseline Subconfiguration Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-190	EPA Calculated Final Subconfiguration City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-191	EPA Calculated Final Subconfiguration Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-192	EPA Calculated Subconfiguration GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-193	Manufacturer Subconfiguration Final Model Year GHG Production Units	New Data Element
				Total New CAFÉ DE's: n=66
Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	CAFÉ	CA-3	Process Code	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-0	Manufacturer Code	Edit to DE Feature(s)

11/23/2010	CAFÉ	CA-1	Model Year	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-4	CAFE/GHG Compliance Category	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-4.5	CAFE/GHG Final Status Indicator	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-53	EPA Calculated Official Model Year Truck CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-54	EPA Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-55	EPA Calculated Official Model Year Import Passenger Vehicle CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-50	Manufacturer Calculated Official Model Year Truck CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-51	Manufacturer Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-52	Manufacturer Calculated Official Model Year Import Passenger Vehicle CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-59	EPA Calculated Baseline Truck CAFE Unrounded 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-60	EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-61	EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-63	EPA Calculated Baseline Truck CAFE Rounded 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-66	EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-67	EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-70	EPA Calculated Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-71	EPA Calculated Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-56	Manufacturer Calculated Baseline Truck CAFE Unrounded 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-57	Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-58	Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-62	Manufacturer Calculated Baseline Truck CAFE Rounded 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-64	Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-65	Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-68	Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-69	Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-75	EPA Calculated Final Truck CAFE Unrounded 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-76	EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-77	EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)

Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	CAFÉ	CA-79	EPA Calculated Final Truck CAFE Rounded 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-82	EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-83	EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-86	EPA Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-87	EPA Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-72	Manufacturer Calculated Final Truck CAFE Unrounded 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-73	Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-74	Manufacturer Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-80	Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-81	Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-84	Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-85	Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-91	EPA Official Truck CAFE Miles Per Gallon	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-92	EPA Official Domestic Passenger Vehicle CAFE Miles Per Gallon	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-93	EPA Official Import Passenger Vehicle CAFE Miles Per Gallon	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-88	Manufacturer Calculated Official Truck CAFE Miles Per Gallon	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-89	Manufacturer Calculated Official Domestic Passenger Vehicle CAFE Miles Per Gallon	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-90	Manufacturer Calculated Official Import Passenger Vehicle CAFE Miles Per Gallon	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-11	CAFE Standard	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-14.1	Test Group	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-21.5	EPA Calculated Footprint Target FE Value (miles per gallon)	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-22	EPA Calculated Unrounded Reformed CAFE Standard	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-22.3	Calculated Unrounded Reformed CAFE Standard	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-22.7	EPA Calculated Final Reformed CAFE Standard	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-25.1	Carline Manufacturer Code	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-110	EPA Calculated Baseline Configuration City FE Value 4 decimal	Edit to DE name
11/23/2010	CAFÉ	CA-31	Equivalent Test Weight (ETW)	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-124	Manufacturer Code	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-125	Division Code	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-126	Carline Code	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-34	Test Group	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-32	Manufacturer Subconfiguration Final Model Year FE Production Units	Edit to DE Feature(s)
				Total Edited CAFÉ DE's: n=61
Date	Dataset	Data Element	Data Element Name	Description of Change

Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	CAFÉ	CA-21	Manufacturer Calculated Footprint Target FE Value (miles per gallon)	Deleted Data Element
11/23/2010	CAFÉ	CA-21.7	EPA Calculated Footprint Target FE Discrepancy Value	Deleted Data Element
11/23/2010	CAFÉ	CA-119	EPA Calculated Baseline Subconfiguration Combined FE Value 4 decimal	Deleted Data Element
11/23/2010	CAFÉ	CA-122	EPA Calculated Final Subconfiguration Combined FE Value 4 decimal	Deleted Data Element
				Total Deleted CAFÉ DE's: n=4
Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	FE Label	GL-78.2	Model Type Descriptor	Edit to DE Feature(s)
11/23/2010	FE Label	GL-79.1	5 Cycle Hybrid Fuel Economy Label Calculation Approach	Edit to DE Feature(s)
11/23/2010	FE Label	GL-79.2	Charge Depleting Fuel Economy Label Calculation Approach	Edit to DE Feature(s)
11/23/2010	FE Label	GL-79.3	Charge Sustaining Fuel Economy Label Calculation Approach	Edit to DE Feature(s)
11/23/2010	FE Label	GL-123	Equivalent Test Weight (ETW)	Edit to DE Feature(s)
11/23/2010	FE Label	GL-130.5	Test 5-Cycle Category	Edit to DE Feature(s)
11/23/2010	FE Label	GL-173.1	Manufacturer-Calculated Gas Guzzler Mile Per Gallon	Edit to DE Feature(s)
				Total Edited FE Label DE's: n=7
Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	Road Load	RL-1	Process Code	Edit to DE Feature(s)
11/23/2010	Road Load	RL-1.5	Road Load Index	Edit to DE Feature(s)
11/23/2010	Road Load	RL-1.6	Model Year	Edit to DE Feature(s)
11/23/2010	Road Load	RL-2	FE Label Model Type Index	Edit to DE Feature(s)
11/23/2010	Road Load	RL-3	FE Label Subconfiguration Index	Edit to DE Feature(s)
11/23/2010	Road Load	RL-4	Test Group	Edit to DE Feature(s)
11/23/2010	Road Load	RL-5	Engine Code	Edit to DE Feature(s)
11/23/2010	Road Load	RL-5.1	Equivalent Engine Code(s)	Edit to DE Feature(s)
11/23/2010	Road Load	RL-6	In-Use Engine Code Decoder	Edit to DE Feature(s)
11/23/2010	Road Load	RL-7	Displacement	Edit to DE Feature(s)
11/23/2010	Road Load	RL-14	Transmission as listed in the FE Guide	Edit to DE Feature(s)
11/23/2010	Road Load	RL-15	Axle Ratio	Edit to DE Feature(s)
11/23/2010	Road Load	RL-16	Rim and tire size	Edit to DE Feature(s)
11/23/2010	Road Load	RL-17	Tire Type	Edit to DE Feature(s)
11/23/2010	Road Load	RL-18	Tire Manufacturer	Edit to DE Feature(s)
11/23/2010	Road Load	RL-19	N/V Ratio	Edit to DE Feature(s)
11/23/2010	Road Load	RL-20	Curb Weight	Edit to DE Feature(s)
11/23/2010	Road Load	RL-21	ETW	Edit to DE Feature(s)
11/23/2010	Road Load	RL-22	Manufacturer-Calculated Total Road Load Horsepower	Edit to DE Feature(s)
11/23/2010	Road Load	RL-24	Target Coefficient A (F0) (lbf)	Edit to DE Feature(s)
11/23/2010	Road Load	RL-25	Target Coefficient B (F1) (lbf/mph)	Edit to DE Feature(s)
11/23/2010	Road Load	RL-26	Target Coefficient C (F2) (lbf/mph**2)	Edit to DE Feature(s)
11/23/2010	Road Load	RL-27	Road Load Determination Method	Edit to DE Feature(s)
				Total Edited Road Load DE's: n=23